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SUBMISSIONS TO THE REVIEW PANEL ON ENVIRONMENTAL LAW ENFORCEMENT IN ALBERTA

SUBMISSIONS TO THE REVIEW PANEL

ON ENVIRONMENTAL LAW ENFORCEMENT IN ALBERTA

1. Joanne Hedenstrom
   Chairperson
   Pollution Sub-Committee
   Alberta Public Advisory Committees to Environment Council of Alberta

2. Mr. Roderick M. McLeod, Q.C.
   Deputy Minister
   Ontario Ministry of the Environment

3. I.D. Mark Egener
   Managing Director
   Alberta Public Safety Services

4. G. Hanslip
   Chairman
   Steering Committee
   Electric Utility Planning Council

5. R.T. Marshall
   President
   The Coal Association of Canada

6. Energy Resources Conservation Board

7. Task Force on Enforcement Activities for Emission During Start-up, Shut-down and Emergency Up-set Situations

8. Ministry of Environment and Parks
   Province of British Columbia

9. Dennis C. Surrendi
   Assistant Deputy Minister
   Fish & Wildlife Division

10. Dr. Steve E. Hrudey, P. Eng.
    Professor of Environmental Engineering
    University of Alberta

11. Alastair R. Lucas
    Professor of Law
    The University of Calgary
    Acting Executive Director
    Canadian Institute of Resources Law

12. J.S. Poyen
    Acting Executive Director
    Independent Petroleum Association of Canada (IPAC)

13. W.G.G. Lindley
    Alberta Regional Committee
    The Canadian Chemical Producers' Association

14. Suncor Inc.

15. T.E. Wood
    Senior Engineer
    Safety and Environmental Affairs
    Shell Canada Limited

16. Marilyn Kansky
    Barrister and Solicitor
    on behalf of
    Environmental Resource Centre of Alberta

17. John Lilley and Brian Free
    Environment Council of Alberta

18. Pulp Industry

19. Martha Kostuch

20. R.A. Wood, President
    Strathcona Industrial Association

21. D.B. Cattran, President
    Fort Saskatchewan Regional Industrial Association (FSRIA)

Alberta

Public Advisory Committees
to
ENVIRONMENT COUNCIL OF ALBERTA

November 18, 1987

Ms. Jillian Flett
Alberta Environment Protection
Enforcement Review Committee
13720 - 101 A. Avenue
Edmonton, Alberta
T5N OL1

Dear Ms. Flett:

The Pollution Sub-Committee of the Public Advisory Committees to the Environment Council of Alberta has the following comments and recommendations in regard to the document on the Alberta Environment Protection and Enforcement Policy:

1. The Pollution Sub-Committee wishes to commend Alberta Environment for conducting a review of licensing and exclusions in licensing.

2. The Pollution Sub-Committee endorses the creation of an Environment Enforcement Division, complete with inspectors.

3. The Pollution Sub-Committee recommends that the review committee be enlarged to include representatives of the public and other concerned organizations or, more preferably, that the Environment Council of Alberta conduct public hearings on environment protection and enforcement.

4. We recommend that some employees in the Department of Environment have legal expertise which will enable them to collect evidence sustainable in the courts in matters of environmental violation.

5. Finally, we recommend that the Alberta Environment Protection and Enforcement Policy contain a statement of equivalency with the Canadian Environment Protection Act. This federal act mentions the principle of equivalency with the Enforcement and Compliance Policy of the Canadian Environment Protection Act and encourages provinces to endorse equivalency, especially because federal regulations don't apply where provincial regulations apply.

Thank you for inviting our comments on this document.

Sincerely,

for: Joanne Hedenstrom, Chairperson
Pollution Sub-Committee

JH/pam

6TH FLOOR · WEBER CENTRE
5555 CALGARY TRAIL · EDMONTON, ALBERTA · T6H 5P9 · (403) 427-5793

MR. RODERICK M. McLEOD, Q.C.
DEPUTY MINISTER
MINISTRY OF THE ENVIRONMENT

ENVIRONMENTAL ENFORCEMENT IN ONTARIO

PRESENTATION TO THE REVIEW PANEL ON ENVIRONMENTAL LAW ENFORCEMENT IN ALBERTA

SEPTEMBER 15, 1987

IN ONTARIO, AS ELSEWHERE, PEOPLE ARE BECOMING MORE CONCERNED ABOUT WHAT THEY PERCEIVE TO BE POLLUTION -- NOT ONLY WHAT THEY CAN SEE WITH THEIR OWN EYES, BUT THE SO-CALLED INVISIBLE POLLUTION IN AIR, WATER AND SOIL.

THE PUBLIC ARE FAR MORE ENVIRONMENTALLY AWARE NOW THAN EVER BEFORE IN OUR HISTORY. POLLUTION, TO SOME, IS NOT ONLY AN AFFRONT, BUT A SERIOUS OFFENCE.

IN RESPONSE TO GROWING PUBLIC CONCERNS, THE MINISTER OF THE ENVIRONMENT ANNOUNCED IN JUNE OF 1985 THE CREATION OF NEW ENFORCEMENT BRANCH AND GAVE IT A STRONG MANDATE OF BEING RESPONSIBLE FOR ALL ASPECTS OF ENFORCEMENT WITHIN THE MINISTRY.

THE ANNOUNCEMENT OF THIS NEW BRANCH REINFORCED THE GOVERNMENT'S COMMITMENT THAT ILLEGAL POLLUTION WILL NOT BE TOLERATED WITHIN THE PROVINCE. BY PROVIDING THE MINISTRY WITH THE RESOURCES TO INITIATE AND CONTINUE WITH AND EFFECTIVE ENFORCEMENT PROGRAM, THE GOVERNMENT HAS DEMONSTRATED ITS FIRM COMMITMENT TO ADMINISTERING ENVIRONMENTAL LAWS.

REPORTING DIRECTLY TO THE ASSISTANT DEPUTY MINISTER (OPERATIONS), THE BRANCH WAS ASSIGNED THE TASK OF DEVELOPING A PRO-ACTIVE ENFORCEMENT PROGRAM TO SEEK OUT AND ACT UPON ENVIRONMENTAL INFRACTIONS.

THE BRANCH WAS GIVEN THE FOLLOWING OBJECTIVES:

1. TO CONDUCT INVESTIGATIONS OF AND PREPARE PROSECUTIONS OF ILLEGAL ACTIVITIES IN THE PRIVATE AND PUBLIC SECTORS;

2. TO SUPPLY INFORMATION IN SUPPORT OF PROSECUTIONS.

PROSECUTIONS WILL BE INITIATED AT THE FIELD LEVEL WITH LIMITED SENIOR MANAGEMENT APPROVAL. THIS APPROACH IS USED IN ALL POLICE-TYPE AGENCIES ACROSS CANADA. THIS POLICY CHANGE IS INTENDED TO ENSURE OBJECTIVITY AND REMOVE THE POSSIBILITY OF ALLEGATIONS OF BUREAUCRATIC OR POLITICAL INTERFERENCE.

IT MUST BE SAID THAT THE APPROPRIATE PUBLIC SERVANTS ARE UNDER NO CONSTRAINTS AS TO WHO WILL BE INVESTIGATED AND WHO WILL BE CHARGED.

YOU NO DOUBT SAW THE MEDIA REPORTS WHEN OUR OFFICERS DECIDED TO RECOMMEND PROSECUTION OF ANOTHER BRANCH OF THE ONTARIO GOVERNMENT. RECENTLY, WE BROUGHT CHARGES AGAINST A MAJOR PUBLIC UTILITY. WE HAVE INVESTIGATED AND CHARGED MUNCIPALITIES, AND WILL CONTINUE TO DO SO WHEN THE CIRCUMSTANCES DEMAND IT.

WE ARE PLAYING NO FAVORITES, AND NONE OF OUR POLITICAL MASTERS HAS SUGGESTED THAT WE DO. I MUST SAY THAT THIS FREEDOM OF ACTION GIVES ME A GOOD FEELING TOWARDS OUR TASK.

WE WERE AUTHORIZED TO RECRUIT 63 PERSONNEL FOR THE NEW BRANCH WHICH INCLUDED 42 INVESTIGATORS TO BE LOCATED IN 15 MINISTRY OFFICES ACROSS THE PROVINCE.

A SPECIAL TASK FORCE OF EIGHT INVESTIGATORS, HEADED BY A MANAGER REPORTING TO THE ASSISTANT DIRECTOR OF THE BRANCH, HAS ALSO BEEN CREATED.

THIS TASK FORCE OPERATES ACROSS THE PROVINCE AND INITIATES INVESTIGATIONS IN THE MOST SENSITIVE ENVIRONMENTAL AREAS. THE TASK FORCE WILL ALSO UNDERTAKE INVESTIGATIONS INVOLVING THE MOVEMENT OF WASTE ACROSS OUR PROVINCIAL BOUNDARIES.

THE BRANCH HAS BEEN GIVEN SOLID SUPPORT FROM OUR MINISTRY FROM THE START. OUR LEGAL SERVICES BRANCH HAS GROWN RIGHT ALONG WITH US. THEIR STAFF OF PROSECUTORS HAS NEARLY DOUBLED IN THE LAST YEAR.

IN THE FIRST FULL YEAR OF OPERATION, THE MINISTRY HAS LAUNCHED OVER 1100 INVESTIGATIONS. ABOUT 25% OF THESE, A TOTAL OF 260 CASES, WERE BROUGHT BEFORE THE COURTS IN THE PERIOD APRIL 1, 1986 - MARCH 31, 1987. THIS HAS BEEN A SHARP INCREASE IN THE PROSECUTORIAL ACTIVITY OF THE MINISTRY WHEN COMPARED TO PREVIOUS YEARS.

CASES TO COURT BY FISCAL YEAR

1980 - 1981	47
1981 - 1982	59
1982 - 1983	36
1983 - 1984	75
1984 - 1985	54
1985 - 1986	86 *
1986 - 1987	260 **

OUR INVESTIGATORS ARE CONDUCTING A LARGE NUMBER OF ONGOING INVESTIGATIONS.

WE HAVE BEEN FORTUNATE TO ATTRACT INDIVIDUALS TO THE MANAGEMENT POSITIONS IN THE BRANCH WHO BRING A WIDE VARIETY OF INVESTIGATIVE AND ENVIRONMENTAL EXPERIENCE.

* THE INVESTIGATIONS AND ENFORCEMENT BRANCH (IEB) BECAME OPERATIONAL JANUARY 1, 1986.

** FIRST FULL YEAR IEB.

WE HAVE ALSO ESTABLISHED A UNIT IN THE BRANCH KNOWN AS THE AERIAL AND GROUND SURVEILLANCE UNIT WHICH EMPLOYS THE USE OF SOPHISTICATED AERIAL PHOTOGRAPHIC EQUIPMENT IN THE DETECTION AND OBSERVATION OF EMISSIONS OR SPILLS TO BOTH AIR AND WATER.

WE ARE ASSISTED IN THIS ACTIVITY BY THE UTILIZATION OF THE VOLUNTARY SERVICES OF THE NINETY-NINES INCORPORATED, AN INTERNATIONAL ORGANIZATION OF WOMEN PILOTS.

WE FEEL VERY FORTUNATE IN HAVING BEEN ABLE TO ATTRACT TO THE BRANCH WHAT I BELIEVE IS A VERY COMPETENT INVESTIGATIVE STAFF IN THE FIELD, FROM WITHIN THE MINISTRY AND OUTSIDE ENFORCEMENT AGENCIES.

IT IS OUR INTENTION TO BRING TOGETHER THE ENVIRONMENTAL EXPERIENCE OF EXISTING STAFF AND THE ON-THE-GROUND INVESTIGATIVE CAPABILITY OF THOSE WHO HAVE JOINED THE MINISTRY FROM OUTSIDE ENFORCEMENT AGENCIES INTO AN EFFECTIVE ENFORCEMENT GROUP CAPABLE OF DELIVERING OUR MANDATE.

THE ADDED RESOURCES AVAILABLE IN THE MINISTRY DEVOTED TO ENFORCEMENT WILL ALSO ALLOW US TO ENHANCE OUR EXISTING ABATEMENT PROGRAMS.

PREVIOUSLY, ABATEMENT OFFICERS WERE REQUIRED TO WEAR TWO HATS -- THEY WERE TO WORK WITH INDUSTRY IN DEVELOPING ENVIRONMENTAL CONTROL PROGRAMS IN A CO-OPERATIVE APPROACH AND ON THE OTHER HAND THEY WERE CALLED ON TO GATHER EVIDENCE AND INITIATE PROSECUTIONS.

STAFF FOUND THEMSELVES IN CONFLICTING ROLES OF NEGOTIATOR AND ENFORCER. THE CREATION OF THIS NEW BRANCH RESOLVES THIS CONFLICT AND ALLOWS US TO INCREASE OUR POLLUTION MONITORING AND ABATEMENT ACTIVITIES ON THE ABATEMENT SIDE AND GIVES US THE ADDITIONAL RESOURCES TO UNDERTAKE INVESTIGATIONS AND PROSECUTIONS.

MANY ABATEMENT OFFICERS, UNDER THE OLD RULES OF PROCEDURE, WERE RELUCTANT TO ABANDON THEIR ATTEMPTS AT CO-OPERATIVELY DEVELOPING CONTROL PROGRAMS WITH POLLUTING INDUSTRY. TO PROCEED TO THE NEXT STEP -- THE ULTIMATE STEP OF RECOMMENDING PROSECUTION -- SEEMED ALMOST LIKE A CONFESSION OF FAILURE.

THAT PERFECTLY UNDERSTANDABLE DILEMMA HAS NOW BEEN RESOLVED. THERE WILL BE NO LESSENING OF ATTEMPTS TO DEVELOP CO-OPERATIVE CONTROL PROGRAMS WHERE THERE ARE REASONABLE PROSPECTS OF SUCCESSFUL RESULTS IN ABATEMENT. THAT IS CERTAINLY THE PREFERRED COURSE. BUT WHEN NEGOTIATIONS ARE UNREASONABLY PROTRACTED, OR WHEN THEY BREAKDOWN, THE ABATEMENT OFFICER HAS THE RECOURSE OF TRANSFERRING THE PROBLEM TO THE ENFORCEMENT BRANCH.

TO FURTHER REINFORCE THE MINISTRY OF THE ENVIRONMENT'S COMMITMENT TO PROVIDING A UNIFORM APPROACH FOR ENFORCING ITS ACTS AND REGULATIONS, THE MINISTER, THE HONOURABLE JAMES BRADLEY, RECENTLY ANNOUNCED A NEW POLICY OF THE MINISTRY.

THE POLICY WHICH IS KNOWN AS "UNIFORM ENVIRONMENTAL ENFORCEMENT" BECAME EFFECTIVE MAY 6, 1986. (SEE ATTACHMENTS).

THE POLICY SETS OUT THE PRINCIPLES AND PROCEDURES THAT WILL BE USED BY MINISTRY STAFF IN ASSURING THAT ENVIRONMENTAL STATUTES ARE UNIFORMLY ENFORCED.

THE MINISTRY HAS CLEARLY SET OUT THAT PROSECUTIONS UNDER ENVIRONMENTAL STATUES WILL BE A RESULT OF INFORMED JUDGEMENT TO ASSURE A NON-DISCRIMINATORY AND EVEN-HANDED APPROACH.

WHERE THERE ARE IMPORTANT REASONS WHY A PROSECUTION WOULD BE INAPPROPRIATE, THE MINISTRY WILL EXERCISE PROSECUTORIAL DISCRETION, HOWEVER, THE REASONS FOR THE DECISION WILL BE RECORDED FOR FUTURE REFERENCE.

THE MINISTRY WILL ALSO SEEK PENALTIES UPON CONVICTIONS OF POLLUTERS WHICH WILL BE COMMENSURATE WITH THE SERIOUSNESS OF THE OFFENCE.

A MAJOR STEP TOWARDS TOUGHENING THE SANCTIONS AVAILABLE TO CONTROL POLLUTERS OCCURRED WITH THE PROMULGATION OF BILL 112 ON DECEMBER 18, 1986. THIS BILL AMENDED THE ENVIRONMENTAL PROTECTION ACT, THE ONTARIO WATER RESOURCES ACT AND THE PESTICIDES ACT.

THE NEW LEGISLATION HAS DRAMATICALLY INCREASED THE PENALTIES AVAILABLE TO SANCTION CONVICTED POLLUTERS. THESE CHANGES ARE THE FIRST SUBSTANTIVE INCREASES IN ENVIRONMENTAL PENALTIES SINCE 1971.

THE FINES STRUCTURE FOR PRIVATE INDIVIDUALS CAUSING POLLUTION REMAIN UNCHANGED. ON FIRST CONVICTION, THE FINES COULD REACH $5000 BUT ADDITIONAL OFFENSES COULD COST UP TO $10,000 PER DAY.

THE LEGISLATURE HAS RECOGNIZED THAT CORPORATE DEFENDANTS SHOULD NOT BE ALLOWED TO MERELY PAY SMALL FINES AND CONTINUE TO POLLUTE. THE FINE STRUCTURE FOR CORPORATE DEFENDANTS HAS BEEN SIGNIFICANTLY STRENGTHENED.

CORPORATIONS NOW FACE FINES UP TO $25,000 PER DAY FOR FIRST OFFENSES AND UP TO $50,000 PER DAY FOR REPEAT VIOLATIONS. BUT WHAT IF THE POLLUTION HAS CAUSED HARM OR SIGNIFICANTLY DAMAGED THE ENVIRONMENT? THE LAW HAS BEEN TOUGHENED TO PROVIDE FOR A MINIMUM FINE OF NOT LESS THAN $2000 PER DAY AND UP TO $50,000 PER DAY WERE ENVIRONMENTAL DAMAGE HAS OCCURRED. IF THE OFFENSE IS A REPEAT OCCURRENCE THEN THE JUDGE MAY FINE THE CORPORATION NOT LESS THAN $4,000 AND UP TO $100,000 PER DAY.

REFLECTING ONTARIO'S COMMITMENT TO MAKE THE PEOPLE CHOOSING TO POLLUTE ACCOUNTABLE FOR THEIR DISCHARGES THE LAW HAS BEEN STRENGTHENED TO ALLOW FOR JAIL TERMS OF UP TO ONE YEAR FOR POLLUTION CONVICTIONS. THIS SANCTION OF COURSE WOULD BE RESERVED FOR THE MOST WILLFUL AND NEGLIGENT POLLUTERS THAT CAUSED SIGNIFICANT HARM.

THE NEW LAWS HAS ALSO BEEN SIGNIFICANTLY STRENGTHENED IN THEIR SANCTIONS FOR LIQUID AND HAZARDOUS WASTE CONVICTIONS. WHERE POLLUTION RESULTS FROM ILLEGAL DISPOSAL OF SUCH WASTES, THE COURTS MAY LEVY FINES UP TO $500,000. THESE FINES ARE SURE TO ACT AS A MEANINGFUL DETERRENCE TO THOSE WHO DARE TO "MIDNIGHT HAUL" THEIR TOXIC WASTES AT THE EXPENSE OF THE GENERAL PUBLIC.

OTHER CONTEMPORARY SENTENCING PRINCIPLES HAVE BEEN INCORPORATED INTO THE POLLUTION LAWS OF ONTARIO. JUDGES CAN NOW ISSUE CLEAN-UP AND RESTORATION ORDERS THEMSELVES. FAILURE TO OBEY THE JUDGE WOULD THEN BE A CONTEMPT OF COURT AND THE FULL FORCE OF THE COURT'S AUTHORITY CAN BE BROUGHT INTO ACTION. JUDGES MAY ALSO EXCEED THE MAXIMUM FINE STRUCTURE WHEN THE POLLUTER HAS ACCRUED FINANCIAL GAIN BY CHOOSING TO POLLUTE. THE OLD MAXIM THAT A PERSON SHOULD NOT GAIN FROM HIS ILLEGAL ACTIVITIES AS NOW BEEN RECOGNIZED IN ENVIRONMENTAL LAW. COURTS CAN NOW FINE A PERSON TO AN AMOUNT EQUAL TO THE MONETARY GAIN REALIZED BY POLLUTING.

FINALLY, THE LAW HAS BEEN AMENDED TO REQUIRE THE MINISTRY TO SUSPEND ALL LICENCES AND PERMITS THAT A CONVICTED PERSON MAY HOLD, IN THE EVENT THAT FINES ARE NOT PAID PROMPTLY. THIS WILL GET AROUND THE COSTLY COLLECTION ACTIONS THAT THE PROVINCE HAS FACED WITH OFFENDERS THAT CARRY ON THEIR BUSINESS WITHOUT PAYING THEIR FINES. ALL PERMITS AND LICENCE, OF COURSE, WILL BE REINSTATED IMMEDIATELY AFTER FINES ARE PAID.

WE WILL RELY ON A VARIETY OF CONSIDERATIONS IN OUR DETERMINATION AS TO WHETHER PROSECUTIONS WILL PROCEED OR WHETHER OTHER POLLUTION ABATEMENT REMEDIES ARE MORE APPROPRIATE.

DECISIONS WILL BE BASED UPON WHETHER THE VIOLATION OF THE LEGISLATION POSES A SIGNIFICANT RISK TO HUMANS OR THE ENVIRONMENT.

THE MINISTRY WILL CONSIDER WHETHER THE POLLUTION CAUSING THE VIOLATION SERIOUSLY JEOPARDIZES THE ACHIEVEMENT OF MINISTRY AIR QUALITY OR WATER QUALITY OBJECTIVES.

DURING THE INVESTIGATIVE PHASE OF THE DECISION MAKING PROCESS, INFORMATION PERTAINING TO WHETHER THE VIOLATION INVOLVED CONCEALMENT OF INFORMATION, DISREGARD FOR WARNINGS, NEGLIGENCE OR WHETHER A DELIBERATE ACT WAS COMMITTED WILL ALL BE PART OF THE MINISTRY'S REVIEW WHEN CONSIDERING WHETHER CHARGES ARE APPROPRIATE.

IN THE PAST THE MINISTRY OF THE ENVIRONMENT HAS RELIED ON A VARIETY OF CERTIFICATES OF APPROVAL, LICENCES AND PERMITS.

IN ADDITION, CONTROL DOCUMENTS SUCH AS CONTROL ORDERS, REQUIREMENT AND DIRECTION ORDERS AND OTHER ADMINISTRATIVE DOCUMENTS HAVE BEEN USED TO REGULATE AND CONTROL DISCHARGES.

THE MINISTRY INTENDS TO ENFORCE THE CONTROL DOCUMENTS THAT HAVE JUST DESCRIBED IN A FAIR AND EQUITABLE MANNER.

IT IS CLEAR NOW, THAT THE LIMITS AND REQUIREMENTS AS SET OUT IN THE DOCUMENTS MENTIONED WILL BE THE EXPECTED DEGREE OF COMPLIANCE THE MINISTRY WILL REQUIRE.

ANOTHER SIGNIFICANT ASPECT OF THE MINISTRY'S UNIFORM ENFORCEMENT POLICY IS THAT OPERATORS OF ANY FACILITY WHICH DISCHARGES WILL BE RESPONSIBLE FOR THEIR EMISSIONS AT ALL TIMES.

THIS WILL INCLUDE MEETING CONTROL DOCUMENT REQUIREMENTS DURING START-UP, SHUTDOWN, BREAK-DOWNS, MAINTENANCE AND DECOMMISSIONING PERIODS FOR PROCESS OPERATIONS AND INDUSTRIAL FACILITIES.

INDEED, THE PRINCIPLES AND PROCEDURES THAT THE MINISTRY WILL AFFECT FOR THE ENFORCEMENT OF STATUTES WILL BE APPLIED EQUALLY TO BOTH THE PUBLIC AND PRIVATE SECTORS.

THE FINAL ASPECT OF THE NEW POLICY SETS OUT THAT THE MINISTRY WILL MAKE WRITTEN REQUESTS FOR ACTION TO REDUCE, PREVENT OR ELIMINATE POLLUTION AND THAT REASONABLE TIME FRAMES WILL BE SPECIFIED.

IN CASES WHERE COMPLIANCE WITH WRITTEN REQUESTS IS NOT FORTHCOMING WITHIN A REASONABLE PERIOD OF TIME, THE MINISTRY WILL APPLY FORMAL SANCTIONS UPON THE POLLUTER TO AFFECT COMPLIANCE. SANCTIONS MAY INCLUDE ADDITIONAL TERMS OR CONDITIONS IN APPROVALS OR ORDERS OR PROSECUTION.

IT IS MY HOPE THAT THE IEB WILL DEVELOP AN IDENTIFIABLE IMAGE, AMONGST THOSE CAUSING POLLUTION, OF BEING A FIRM, YET, FAIR, ENFORCEMENT GROUP.

IN ORDER TO EFFECTIVELY ALTER THE CONDUCT OF VIOLATORS OF ENVIRONMENTAL LAW IT IS IMPORTANT THAT THE RESPONSE OF THE MINISTRY OR ANY AGENCY BE PREDICTABLE.

THE IEB WILL PROVIDE FOR THE MINISTRY IN ONTARIO THE PREDICTABILITY BY EFFECTIVELY DETECTING, INVESTIGATING AND CHARGING VIOLATORS. ONCE THIS BECOMES ROUTINE TO US, AND EXPECTED BY POLLUTERS AS THE INEVITABLE CONSEQUENCE OF THEIR ACTIONS. I THINK WE WILL BEGIN TO SEE PROFOUND CHANGES FOR THE BETTER.

THAT, AT LEAST, IS OUR HOPE, AND THE PRIME OBJECTIVE OF THE INVESTIGATIONS AND ENFORCEMENT BRANCH.

ONE LAST ITEM I WISH TO REFER TO IS THE EMERGING CONCEPT OF ENVIRONMENTAL AUDIT.

THIS CONCEPT, WHICH IS NOW PART OF THE US ENVIRONMENTAL PROTECTION AGENCY'S OFFICIALLY ENDORSED POLICIES MEANS TAKING STOCK OF THE ENVIRONMENTAL ASSETS AND LIABILITIES OF A GIVEN INDUSTRIAL OR MUNICIPAL FACILITY. THE IDEA IS TO DETERMINE THE CHARACTERISTICS OF ALL THE POTENTIAL SOURCES OF POLLUTION FROM A FACILITY.

TO ADEQUATELY ASSESS THE SITUATION A COMPANY SHOULD REGULARLY REVIEW ALL THE OPERATING PRACTICES AT ITS PLANTS. THE TYPES OF WASTES GENERATED SHOULD BE CHARACTERIZED AND THE METHODS USED TO CONTROL THEM DEFINED. AN ASSESSMENT OF THE ADEQUACY OF ALL ENVIRONMENTAL CONTROL SYSTEMS SHOULD BE MADE. THE RISKS ASSOCIATED WITH CERTAIN OPERATIONS, SUCH AS START-UPS AND SHUT-DOWNS, SHOULD BE ASSESSED AND APPROPRIATE PLANS MADE TO PREVENT ENVIRONMENTAL CONSEQUENCES.

PERHAPS THE STARTING POINT FOR AN ENVIRONMENTAL AUDIT IS TO ASSESS COMPLIANCE STATUS FIRST. HAS THE COMPANY MET ALL THE STANDARDS SET OUT UNDER THE ENVIRONMENTAL LAWS? THE NEXT STEP IS TO PUT MEANINGFUL ENVIRONMENTAL PROTECTION PROGRAMS INTO PLACE. THIS WILL USUALLY MEAN A ROUTINE MONITORING PLAN TO DETERMINE THE LEVELS OF DISCHARGE. IT MAY ALSO MEAN SETTING UP A REGULAR MAINTENANCE PLAN TO ENSURE THAT EQUIPMENT THAT COULD FAIL AND CAUSE ENVIRONMENTAL EPISODES ARE REGULARLY CHECKED AND REPAIRED, BEFORE CATASTROPHES OCCUR.

THE MANAGER ALSO HAS A RESPONSIBILITY TO INFORM ALL MEMBERS OF HIS STAFF OF THE NEED TO BE ENVIRONMENTALLY CONSCIENTIOUS. OFTEN IT HAS PROVEN THAT POLLUTION CONTROL IS MORE OF A MANAGEMENT CHALLENGE THAN A TECHNICAL PROBLEM SOLVING EXERCISE.

A CONTINGENCY PLAN TO HANDLE SPILLS, OR ROUTINES TO BE FOLLOWED WHEN EMISSIONS EXCEED NORMAL LEVELS SHOULD BE THOUGHT OUT IN ADVANCE OF PROBLEMS. PROCEDURES FOR INFORMING THE MINISTRY OF THE ENVIRONMENT IN THE EVENT OF AN ACCIDENT SHOULD BE UNDERSTOOD BY ALL EMPLOYEES. IN THESE WAYS, THE CORPORATION CAN SHOW THAT IT IS TAKING ALL REASONABLE CARE IN THE PROTECTION OF THE ENVIRONMENT. THIS WILL CERTAINLY BE IMPORTANT IN NOT ONLY PROTECTING THE ENVIRONMENT BUT ALSO IN PROTECTING COMPANIES, DIRECTORS AND OFFICERS FOR PROSECUTION.

IN ONTARIO, WE HAVE NOT FINALIZED A MINISTRY POLICY WITH RESPECT TO ENVIRONMENTAL AUDITS. WE CERTAINLY WANT TO ENCOURAGE THEM BUT AT THE SAME TIME, REALIZE THAT THERE MAY BE DIFFICULT PROBLEMS ARISING OUT OF A CORPORATION'S FEAR THAT THE RESULTS OF A THOROUGH AUDIT MAY SUBSEQUENTLY BE SEIZED PURSUANT TO A SEARCH WARRANT AND USED AGAINST IT IN A PROSECUTION.

- oOo -

Alberta
PUBLIC SAFETY SERVICES
Headquarters

Office of the Managing Director

10320-146 Street, Edmonton, Alberta, Canada T5N 3A2 403/427-2772

File: 3070-6-1

October 27, 1987

Review Panel on Environmental
Law Enforcement
13720 - 101 A Avenue
Edmonton, Alberta
T5N 0L1

Attn: Panel Secretary, Ms. Jillian Flett

Dear Ms. Flett:

Alberta Public Safety Services was advised of your activity by letter from the Minister of the Environment dated September 30, 1987.

I have attached a submission for consideration by the panel which highlights the enforcement phase-in mechanism and the concept of "associate" enforcement offices which APSS used in the implementation of the dangerous goods control program. I hope that this may be useful to the panel.

Yours truly,

I.D. Mark Egener
Managing Director

SUBMISSION TO THE REVIEW PANEL
ON ENVIRONMENTAL LAW ENFORCEMENT

The Dangerous Goods Control Division of Alberta Public Safety Services is the provincial government agency responsible for the administration and enforcement of the Transportation of Dangerous Goods Control Act and associated Regulations. The agency has recently been involved in the implementation of the province wide program with respect to the transportation of dangerous goods, and considers that the panel may be able to draw from its experiences when formulating recommendations concerning environmental law enforcement.

The implementation plan for the enforcement of the Act and Regulations was based on a "phased-in" approach using 3 primary groups for the enforcement activities:

(i) Facilities Inspectors - being full time APSS employees designated as Dangerous Goods Inspectors for all aspects of the Act and Regulations,

(ii) On-Highways Inspectors - being those inspectors that will undertake vehicular inspections in relation to the Act and Regulations as part of their regular law enforcement duties. These personnel include members of the R.C.M.P., City Police Forces and the Transport Officers of Alberta Motor Transport Services, and

(iii) Crown Prosecutors of the Alberta Attorney General's Department.

FACILITIES INSPECTORS

In March 1983, the implementation plan was put into effect with the hiring of the 7 full-time APSS Facilities Inspectors. These inspectors were given an extensive training program encompassing the regulations, technical aspects, enforcement and prosecution procedures, awareness, public relations and safety issues before being assigned to one of 5 regional offices in July 1984. The inspectors function in the first 18 months of their assignment in the field was to conduct a detailed and intensive awareness program with the affected industries, the local authorities, and the general public to ensure an acceptable level of knowledge of the impending legislation in their regions to effect a smooth transition once proclamation of the Provincial Act occurred.

On proclamation of the Provincial Act, the role of the inspectors shifted from one of education and awareness to one that had a significant compliance component, which included the issuance of warning tickets and the prosecution of repeat violators or significant violations. These included the follow up investigations as a result of an on-highway identification of a shipper violation.

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At the present time, the Facilities Inspectors are completing routine inspections, (including re-inspections), investigation of infractions with the intent of addressing the concern through prosecutive action, and the ongoing, but smaller public awareness component.

ON-HIGHWAYS INSPECTIONS

The second phase of the administration and enforcement implementation plan was the identification of those provincial government personnel who have a role to play in the enforcement of the Regulations on the highway. The primary agencies identified were:

(i) the R.C.M.P.
(ii) City Police Forces
(iii) Motor Transport Services Transport Officers

Before commencing any training or enforcement of the on-highways inspectors, APSS developed and entered with a memorandum of understanding with each of the organizations identified.

Personnel from each of these organization were given a selective training program based on the proposed role of the On-Highway Inspection function. In the case of the R.C.M.P., APSS provided the training to the R.C.M.P. training officers who then provided the actual training to the detachment level. On successful completion of the training program, each inspector is designated by APSS with respect to the limited enforcement role that the On-Highway Inspectors have to play in the program.

The memoranda of understanding (MOU) between APSS and the On-Highway inspection organizations lays down the procedures with respect to reporting to APSS, including the notification of incidents and violations, and the mechanisms for prosecutions.

There is an effective notification and follow-up clause built into the MOU, which provides for the notification of On-Highway infractions to APSS, to provide for the follow-up inspection and enforcement action at the originating site by APSS or other provincial/or the federal government. The philosophy behind this is simple - the resolution of a problem at the originating site will result in the resolution of a number of problems on the highway.

ATTORNEY GENERAL'S DEPARTMENT

Once the prosecutive action commenced under the Provincial Act, APSS provided training and material to the Crown Attorney's designated by the Attorney General's Department, to familiarize the prosecutors with the principles of the legislation prior to them having to prosecute a case under the legislation. Ongoing liaison is maintained with the prosecutors to ensure that they are fully aware of the details surrounding any case and to clarify for them any points that are required. There have been 3 successful prosecutions to date in 1987, with a further 2 cases currently before the courts. A large number of warning notices have been issued with a number of follow-up investigations under way.

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A further process that is currently before the relevant legal authorities, is that of amendment of the Summary Convictions Act and associated regulations, to provide for the inclusion of Transportation of Dangerous Goods Control Act violations in the schedule of offences under this statute. This will provide for the so called "ticketable offence" and the payment of the voluntary penalty as laid down in the Summary Convictions Act. This will provide for a significantly enhanced enforcement program, particularly in relation to On-Highway offences. It is anticipated that this process will be completed within the next 12 months.

Electric Utility Planning Council

Members
Alberta Power Limited
TransAlta Utilities Corporation
The City of Calgary
Edmonton Power
The City of Lethbridge
The City of Red Deer
The City of Medicine Hat

Observing Members
Public Utilities Board
Energy Resources Conservation Board
Alberta Electric Energy Marketing Agency

Advisory Members
Alberta Transportation & Utilities
Alberta Environment
Alberta Energy

Your File: 007-17.23-11

1987 October 26

ALBERTA DEPARTMENT OF

2726

Assistant Deputy Minister's Office

Alberta Environment
Environment Protection Services
9820 - 106 Street
Edmonton, Alberta
T5K 2J6

ATTENTION: Mr. K. Smith
Assistant Deputy Minister

Dear Sir:

Re: **Review Panel on Environmental Law Enforcement**

In response to the letter from the Hon. Ken Kowalski dated September 30 1987, representatives of Alberta's major electric generating utilities have reviewed the Panel's "Issues for Discussion".

It is the consensus of the utilities that a number of these issues are of major concern to the electric generating industry in Alberta. These concerns are summarized below. Although other concerns exist, the tight October 31, 1987 deadline does not permit a more detailed response.

1. **The Consultative Approach**

In the case of the electric utilities, the record shows that this approach has served the public interest well. Major strides have been made in reducing emissions as new pollution abatement technology became available and agreed practicable in consultation with government. For example, when Alberta Environment was originally formed about sixteen years ago, flue gas particulate removal facilities at coal-fired power plants normally had efficiencies of less than 85%. Today efficiencies exceed 99% and the investment in capital and operating costs for particulate removal are several times greater per megawatt in real terms.

The benefits of the consultative approach should not be discounted. While agreeing that flagrant offences and an unjustifiable lack of cooperation by industry should be dealt with firmly, we believe that the adoption of an increased adversarial stance towards good corporate citizens such as the utilities, will be counter productive. It will foster an atmosphere of confrontation and increased secrecy which would likely have a detrimental effect on Alberta Environment meeting its objectives in the longer term.

2. **Emission Standards that can never be exceeded under any circumstances**

In common with many industrial plants, fossil fuel-fired power generating stations are subject to upsets which may increase emissions above normal compliance levels. These upsets are infrequent, of short duration and often beyond the control of the plant operator. In considering whether these upsets justify the imposition of a "never to be exceeded" standard, we believe there are two key criteria. Firstly, and of overriding importance, will these upsets result in significant environmental damage or impact to human health? If not, the imposition of such a standard would yield no real benefit and simply result in a wasteful expenditure on the part of industry. We believe the record shows that upsets at thermal power plants in Alberta have not had a significant impact on human health or the environment.

Secondly, is it practical to derive a meaningful standard which would cover all upset situations? In large measure, it would indeed be impractical to impose such limits on fossil fuel-fired power plants. For example, on very rare occasions the entire electrostatic precipitator system on a coal-fired power plant unit may trip out for a short period. Even if it were possible to shed the unit load (and it often is not without causing severe hardship to the consumer) there would be a brief period when the opacity level of the smoke stack emission would be 100%. We see no practical way of avoiding such an eventuality but would emphasize that such a short term emission above the licence limit would pose no significant environmental or health impact. At worst, it would be a nuisance.

The utilities consequently believe that the application of "never to be exceeded" standards to the Alberta electric power generating industry would not be in the public interest, but counter to it if higher electricity rates resulted. In addition, we recommend that a mechanism for official variances remain in place to deal with unforeseen conditions if in the overall public interest as determined by appropriate government authorities.

3. **Guidelines vs Regulations**

We believe that Guidelines often have a distinct advantage over Regulations where site-specific circumstances are more efficiently regulated by a flexible approach. Such is usually the case at coal-fired power plants located at different mine sites. For example, the environmental concerns relating to water resource protection is frequently very different at different sites. The delegation of some discretion to suitably qualified government officials to allow some common sense flexibility on such matters should not affect enforceability.

We do not see a problem enforcing Guideline provisions if these are specifically referenced in licences to operate.

4. Use of Industry Monitoring Data

With the increased sophistication of continuous monitoring and data systems, particularly in air/stack monitoring, large volumes of emission information can now be routinely reported to Alberta Environment. This data may be used as a good indication of the compliance record of a plant and for signifying trends but we have reservations that the data will always be suitable for measuring legal compliance. Apart from the inherent inaccuracies of the instrumentation (in some cases +20%) faults occur despite sound quality assurance programs. Legal compliance should be measured only by Alberta Environment when conducting the necessary sampling or testing on site. When conducting compliance tests, the use of certain industry instrumentation may be necessary where it is impractical to use portable instruments (e.g. liquid flow meters), provided the inherent inaccuracies are taken into account.

The electric utilities greatly appreciate this opportunity to comment on the issue of environmental enforcement. We believe that the consultative approach of Alberta Environment has been a positive factor in expediting the major reduction in emissions achieved by the electric generating utilities over the past sixteen years and can continue to play an important role in the future.

Your favourable consideration of our submission will be much appreciated.

Yours truly,

G. Hanslip, Chairman
Steering Committee

LMJ/mh

c. Steering Committee Members
Council Members
V. McNicol
H. Alton

THE COAL ASSOCIATION OF CANADA

October 16, 1987

Mr. K. R. Smith
Chairman
Environmental Law Enforcement Review Panel
Alberta Environment
14th Floor
9820 - 106 Street
Edmonton, Alberta
T5K 2J6

Dear Mr. Smith:

We are in receipt of the letter dated September 30, 1987 from the Honourable K. Kowalski, Alberta Minister of the Environment, informing us of the Review Panel on Environmental Law Enforcement. We are pleased to take this opportunity to comment on the objectives of the Panel and to express our expectations of a reasonable system for enforcement of environmental law in the province.

The Coal Association of Canada is an association of companies engaged in the exploration, development and production of Canadian coal. In Alberta, The Coal Association members operate ten mines which, in 1986 produced coal worth $425 million. The mining and preparation of coal in Alberta is capital intensive and uses modern, clean technology which provides cost effective environmental protection. In order to assist the Review Panel in their deliberations we offer the following comments for your consideration.

1. The Coal Association members operating in Alberta are keenly aware of the need for environmental protection. We believe that through the existing, and very lengthy process for approvals of design, construction and operation under the regulations, the equipment and procedures for environmental protection are incorporated into every operating mine in the province.

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Suite 301, 1000 Eighth Avenue S.W. Calgary, Alberta T2P 3M7 Telephone (403) 262-1544, Telex: 03-827596, Telefax: (403) 265-7604

In order to improve the efficiency of our industry we have, and remain, committed to the goal of regulatory reform as first introduced in our proposal to the Alberta Caucus Standing Committee on Economic Affairs. In that proposal we pointed out that environmental protection measures undertaken by the coal industry are already extensively regulated under the Clean Air, Clean Water and Land Surface Conservation and Reclamation Acts. We also stated further that considerable efficiencies could be realized by streamlining and consolidating the regulatory process. Our discussions with Alberta Environment, Alberta Energy Resources Conservation Board and Forests, Lands and Wildlife lead us to believe that there is strong support for simplifying the regulations and their enforcement.

We are concerned that addressing regulatory enforcement in isolation may overlook the demonstrable benefits of a comprehensive and coordinated approach to regulatory reform. We, therefore, recommend that the Panel consider enforcement in the context of overall regulatory reform.

2. This review of environmental law enforcement in Alberta comes at a time when separate initiatives have been taken by Environment Canada to introduce enforcement and compliance procedures for the proposed Canada Environmental Protection Act and for the Canadian Hazardous Products Act, regulations for which have just been issued.

   We recommend that the Review Panel's action plan include statements on the inter-relationship of Provincial and Federal enforcement procedures.

3. In our experience, natural phenomena such as storms, as well as mine and preparation plant start-up and shut-down procedures may lead to air and water quality excursions from licence limits. It is our view that the practical effects of regulation and enforcement, in normal and abnormal conditions, are most effectively dealt with at the field operations level. We are therefore very surprised to see that the Review Panel and the majority of invited presentations come from regulatory staff and administrators.

   We strongly recommend that field operating personnel be actively involved in the review process and that the Review Panel consider the impact of enforcement related to emergency procedures, shut-downs and start-ups, that may have wide implications on the normal operating licences and approvals of mines and preparation plants.

4. As noted above, we believe that an awareness of normal and emergency operating procedures by regulatory agencies is essential to the rational application of compliance guidelines to enforcement of environmental law. The industry has always maintained that regulatory control is most effective if carried on a site by site basis with thorough discussion and mutual cooperation of staff from industry and government.

We would be particularly distressed to see Alberta Environment adopt the legalistic and adversarial approach prevalent in the United States and now emerging in Ontario.

This approach tends to remove much of the flexibility for adapting and adopting better and more efficient technology and delays the responses that solve problems in environmental protection. Our observations are that an overly legalistic and adversarial approach can also lead to responses which have little to do with effective and lasting protection of the environment.

We recommend that the Review Panel guard against recommendations that would support such initiatives.

We look forward to seeing the Review Panel's action plan and participating with the government in ensuring that environmental protection is given the priority it deserves, while maintaining efficient and productive coal operations in the province.

Yours very truly,

R. T. Marshall
President

PDL:spw

SUBMISSION OF THE

ENERGY RESOURCES CONSERVATION BOARD

TO THE

REVIEW PANEL ON ENVIRONMENTAL LAW ENFORCEMENT

Introduction

This submission has been prepared in response to the request by the Review Panel on Environmental Law Enforcement that the Energy Resources Conservation Board (hereinafter referred to as the "ERCB") appear before it to discuss the ERCB's approach to "environmental law enforcement".

This submission is a framework for the ERCB's oral presentation and will assist in questioning by the Review Panel at that time. What follows briefly describes the ERCB's philosophy and comments generally on some of the Review Panel's issues of consideration. The ERCB is responsible for some nine Acts and associated regulations and directives and issues in the order of fifty different types of approvals, orders, permits and licences.

The ERCB's basic mandate to generally regulate the energy industry in the Province includes only a peripheral environmental jurisdiction; therefore, environmental enforcement by the ERCB is only a small portion of its enforcement activities. This document attempts to identify the kind of enforcement used by the ERCB in general, whether related to environmental or other matters.

A. The ERCB's Philosophy on Compliance

The ERCB's approach to ensuring compliance with the many statutes, regulations and directives it administers is through direct and clear communication and co-operation with operators which includes moral suasion and education. This approach is taken having in reserve the ERCB's ability to impose shut-downs until the problem is rectified, call

inquiries, cancel approvals and/or initiate judicial prosecution where appropriate. Given this philosophy, the terms "abatement and prevention" rather than "enforcement" more appropriately describe the ERCB's approach. In other words, the ERCB's philosophy has been to pragmatically "fix the problem and prevent it from happening again". Prosecution has a role to play in this philosophy, especially for those occurrences of blatant disregard for regulations and/or remedial direction.

Reasons for Philosophy

The ERCB recognizes there is a basic difference between its approach to so-called "enforcements" and that of police-type surveillance and enforcement, but has taken this approach for valid reasons. Given its broad mandate to regulate the energy industry, police-type surveillance is impractical. With limited available resources the ERCB is able to accomplish more in terms of ensuring compliance by communication and moral suasion. This approach relies heavily on th mutual respect and understanding between the ERCB and industry and the general willingness of operators to comply with rules when they understand them and the reasons for them.

When necessary the Board will direct shut-down of facilities. This direction is taken more often than the initiation of prosecution in that shut-downs have an immediate financial and inconvenience impact on operators which can be greater than would the punishment flowing from a successful prosecution.

Much of the foregoing evolved as a result of the basic reason for the creation of the ERCB. The ERCB's main mandate originates from a need for conservation which was not only recognized by the industry now being regulated, but also encouraged by it. Accordingly, the approach taken by the ERCB has in large part been successful.

Key Requirements for Philosophy to Work

Certain key requirements are necessary in order to implement the foregoing philosophy. The ERCB must rely upon experienced capable and credible technical staff who have the ability to communicate well with the industry and general public. There must be a general attitude of compliance on the part of the industry as a whole and generally with each company. These factors are in place. There is obviously a need for adequate empowering provisions allowing the ERCB to shut-down or prosecute when necessary. The technique used by the ERCB to rectify problems or contraventions is that of direct on-site action, meetings with the company, schedule for completion, and follow through until rectified, with the ever present potential of shut-down for non-compliance.

Questions Relating to the ERCB's Approach

The ERCB has generally been successful with its approach; however, it recognizes certain outstanding questions and potential for improvement. One such area is a need to document its approach to avoid inconsistencies.

Recently, the ERCB has been called upon to deal with more general broad public interest issues. Some of these issues are of an environmental impact nature, most of which are only peripherally within the ERCB's jurisdiction. Questions facing the ERCB today are firstly, what jurisdiction it has to ensure compliance and secondly, if such does exist, whether the philosophical approach discussed above will work when dealing with these issues.

As a result of the ERCB's philosophy, situations requiring prosecution are relatively few. This review has led to the conclusion that for those requiring prosecution the internal process currently used is not completely satisfactory. The ERCB intends to review it.

The general public's perception is that the ERCB does not prosecute enough. The public should be made aware of the minimal impact of prosecutions generally on a complainant especially when compared to the impacts of alternative measures such as shut-downs.

B. Comments on Issues of Consideration

The ERCB has some general comments on some of the issues of consideration provided by the Review Panel. The following sets out these comments. (Note: Numbering is as per the Review Panel's Issues for Consideration document.)

II Review of Start-Up Clause in Licence to Operate

(a) The ERCB believes that specific approval conditions are required and in fact imposes them on facilities it approves. It should be noted that the emissions that would take place must be in a manner where there is adequate dispersion to ensure compliance with ambient air quality standards. For example, emissions of natural gas which contain H_2S must involve flaring the gas to minimize potential impacts. The ERCB:

1. Limits emissions on an annual basis to 0.5% of inlet at gas plants and 0.5% of energy input at the Syncrude Oil Sands Plant.

2. At gas plants in the first year of operation the limit is increased to 1%.

3. The track record of gas plants has been such that no further licence conditions related to start-up appear to be required.

Further, oil sands plants frequently have start-ups and shut-downs, and they appear to the ERCB to be responsibly carried out by the operator.

4. The ERCB does not limit the number of plant start-ups and shut-downs and does not see a need for such a requirement at this time. However, the ERCB does monitor the frequency of plant start-ups and shut-downs and will take action with the plant operator if sulphur recovery or gas or energy loss appears excessive, or if complaints are received.

(b) For gas plants, because of the large numbers and relative ease of operation, the ERCB does not see a need for presentations by plant operators respecting start-up and shut-down practices.

(c) ERCB staff witness as many as practical of gas plant start-ups and shut-downs. Specifically, with respect to gas plants, staff monitor catalyst regeneration procedures to ensure emissions are adequately controlled and other emissions are controlled. However, at oil sands plants there is no specific monitoring of plant start-ups and shut-downs other than if there is an emergency shut-down, in which case the reasons for the shut-down are investigated by ERCB staff.

III Review and Evaluate Present Enforcement Approach
This has been addressed in Part A of the submission.

IV The ERCB has no comment.

V Develop Recommendations

To provide recommendations relating to the ERCB's jurisdiction would require a review in detail from a practical and legal perspective. Be-

cause of the large variety of approvals issued by the ERCB, such a review cannot be completed in the time available: however, the ERCB offers the following comments to the Panel.

(a) The ERCB considers its provisions adequate in that it is afforded the power to take direct action at the site, shut-down or suspend if necessary, or initiate prosecution.

(b) Because it is satisfied with the success of its philosophy, the ERCB does not rely upon the criminal law process per se, except in relatively few situations where flagrant and intentional disregard for the rules is evident.

(c)
(d) No comment. No direct involvement nor review undertaken.

(e) The ERCB does incorporate by reference certain accepted third-party criteria in its regulatory provisions, eg, ambient air quality standards, CSA standards. There is, as a result, a need that ERCB staff have a working familiarity with such standards. Ensuring compliance with such standards is difficult from a practical perspective: however, the industry generally is well aware of such standards and is compliant with them.

Having in mind the ERCB philosophy and limited experience with prosecutions, it has no comments on the clarity of standards and their suitability in terms of enforcement through the courts.

(f) 1. The ERCB believes that its approvals are sufficiently clear and specific as to ensure reasonable ease of enforcement, recognizing the approach it normally uses. The ERCB has so far been successful in enforcing its approvals, but generally not through the route of prosecution.

2. There is little discretion given the ERCB staff in waiving or varying terms of approvals. However, the severity of action taken during surveillance varies depending on the existing circumstances.

3. The ERCB does not typically insert in its approvals specific statements on due diligence. It does not have extensive experience regarding use of this factor as a defence in a court. In its own surveillance and resulting ERCB action it does have regard for the due diligence exhibited by the operator.

4. Depending on how these facilities are defined, the ERCB may not have any such jurisdiction. If it does, it treats these generally in the same manner as other facilities in terms of enforcement.

(g) No comment. The ERCB does not issue Control Orders. It does issue Closure Orders (C Orders) when it officially stops an operation due to problems. It gives immediate notice and is required by statute to hold an inquiry within 15 days.

(h) As discussed earlier, the ERCB's philosophy is that of "abatement and prevention" rather than enforcement through prosecution. Accordingly, the type of monitoring available is suitable for the ERCB's purposes.

PRESENTATION

by

ENFORCEMENT TASK FORCE

to

ENFORCEMENT REVIEW PANEL

September 29, 1987

PRESENTATION
BY
ENFORCEMENT TASK FORCE

- OUTLINE -

SECTION 1: - BACKGROUND
- PRESENT SYSTEM

SECTION 2: TERMS OF REFERENCE
- WAIVER
- MAXIMUM LIMITS

SECTION 3: TERMS OF REFERENCE
- OTHERS

ALTERNATIVE OPTIONS

FURTHER ACTIONS

SUMMARY - 1

Actions

Reviewed Terms of Reference:

- identified strengths/weaknesses
- discounted three of Terms of Reference

Narrowed focus to practical improvements in enforcement:

I. "Waiver" (T of R #5)

II. Maximum Emission Limits (T of R #2)

III. Modify License/Permit to Construct (Additional)

Agreement

- o successful two meetings of Task Force
- o present enforcement hierarchy is effective
- o only further refinement of the present process is required
- o More dialogue needed to reach firm recommendations on I, II and III

SUMMARY - 2

Proposed Approach

- More representative group
- Similar type of Committee to H.C.A. Advisory Committee
- "Fast track" within Minister's time frame

Objective

- Specific recommendations

SECTION I

I. PANEL OPERATION

II. TASK FORCE
- Resource Personnel
- Terms of Reference
- Mandate
- Monitoring and Enforcement Issues
- Areas of Emphasis

III. PRESENT ENFORCEMENT SYSTEM

PANEL OPERATION

- Improve the present enforceability of regulations
- Meet with various groups and agencies to receive input on enforcement
- Examine technical and legislative aspects
- Present an Action Plan to the Minister of Environment
- Completion Date:
  October 31, 1987

TASK FORCE
(RESOURCE PERSONNEL)

ALBERTA ENVIRONMENT

ENERGY RESOURCES CONSERVATION BOARD

CITY OF EDMONTON

INDUSTRIAL ASSOCIATIONS

Canadian Chemical Producers' Association

Canadian Petroleum Association/
Independent Petroleum Association of Canada

Fort Saskatchewan Regional Industrial Association

Strathcona Industrial Association

FOREST PRODUCTS

Canfor

Proctor and Gamble

TASK FORCE
(OBJECTIVES)

RESPOND TO TERMS OF REFERENCE

FRAMEWORK:
- Start-up
- Shut-down
- "Normal" Operations
- "Non-Normal" Operations

CONSIDER:
- Existing Practices
- Environment/Health
- Monitoring
- Enforcment

RECOMMENDATIONS (If Feasible)

EMPHASIS:
- Concepts
- Principles

DE-EMPHASIZE:
- Methodology
- Implementation

PRESENT COMPLIANCE SYSTEM

- Consultative Approach Works
- Consultative Approach Should Continue
- Voluntary Compliance Probably Most Effective
    - Probably also most cost effective
- Some Changes Needed to Deal With in Environmental Protection
    - On-going non-compliance
    - Flagrant abuse

ENFORCEMENT HIERARCHY

NON-COMPLIANCE

- Technical discussion between operator and Department.
- Issue of directives.
- Issue of control orders.
- Issue of stop orders.
- Recommendation for Prosecution.

PRESENT PROCESS

- 98% of industrial operations in compliance (ongoing).
- 2,200 air licenses and 800 water licenses.
- 600 monthly reports on air, water and waste go to Department.
- This process is not used in Ontario.

SECTION - II

TERMS OF REFERENCE

Examine implications and feasibility of:

ONE: **Maximum limits on frequency, duration and number of start-ups.**

TWO: **Maximum limits on emissions released under any situation.**

THREE: **Detailed requirements for minimizing emissions during start-up and shut-down.**

FOUR: **Compliance with emission standards during start-up, shut-down and emergency up-set.**

FIVE: **Exempt start-up, shut-down and up-set from emissions standards.**

IN THIS SECTION, DISCUSS:

- **Background**

  FIVE: Alternatives to "Waiver" Clause

  TWO: Maximum Limits ("never to be exceeded")

- **Other Option**

BACKGROUND

1. Commissioning of:
   - New Plants
   - Major Alterations
2. Scheduled Start-up
3. Scheduled Shut-Down
4. Foreseeable Event
5. Unforeseeable Event

START-UP AND SHUT-DOWN - 1

General

- Industrial practice is to minimize start-up and shut-down.
- All necessary steps taken to minimize shut-downs because of associated revenue loss.
- Could depend on type of operation and individual plant.
- Mechanism for reporting exceedences during start-up is in place.
- Not reasonable for the Department to specify duration or the number of start-ups or shut-downs over a given time period.

START-UP AND SHUT-DOWN - 2

Use of Specific Emission Limits

- Use could put a greater burden on the Department and on industry. (Monitoring and number and type of monitoring devices needed)
- Use of license limits to control commissioning, start-up and shut-down could result in unacceptable choices to the operator (worker safety vs environment release).
- No specific limits for emergencies because of inflexibility in operation that could result.
- Inability to define all parameters and all limits for a given operation.
- Three options regarding inclusion of limits in the license:
    - Exclude all limits
    - Include all limits
    - Compromise between these two options (waiver)

LIMIT LEVELS

Limit 1: **"Life Threatening"**

- Impairment of Health

Limit 2: **Nuisance**

Limit 3: **Normal Plant Operations**

ENFORCEMENT OF LIMITS

Option 1: **In the License**

Option 2: **In the Act/Regulations**

CATEGORIES OF LIMITS

CATEGORY 1: **"Life Threatening"**

- **Plant should be voluntarily shut-down**
- **Operator must not permit this to continue**

CATEGORY 2: **Technical Limits**

- **Long-term environmental impact**
- **Set through consultation**

"IMMEDIATELY HARMFUL"

Concept of "Immediately Harmful"

Advantages

- **Directly related to the condition of the environment in an acute sense.**
- **This situation can be handled from a regulatory review point "after the fact".**

Disadvantages

- **Vague**
- **Difficult to Prove**
- **Not preventative**
- **Subjective**

WAIVER CLAUSE

FIVE: **Exempt start-up, shut-down and upset from emission standards.**

Equates to the "waiver" clause.

Issues:

- **Is Clause 4.1 "reasonable"?**
- **Included in the license?**
- **Start-up addressed in license?**
- **Start-up excluded from licenses?**
- **No emission limit if "reasonable care".**
- **Health/environment effects not addressed.**
- **"Nuisance" is a grey area.**

Comments:

- **Few waiver clauses**
- **Recognizes variability in plant operations.**

AGREEMENT:

- **Discontinue waiver ~~having no~~ without an ceiling limit.**
- **"DUTIES" - C.A.E.R. based**

  (Community Awareness and Emergency Response)

"LIFE THREATENING" SITUATIONS
"DUTIES"

Three Duties would be required of the operator:

- **Prior to issue of new license.**
- **Prior to renewal of existing license.**

1. **Identify operating conditions that could result in emissions that could acutely impact health, safety, and environment.**

2. **Have an emergency plan in place that includes informing neighbouring communities (including government).**

3. **Follow predetermined procedures in place to minimize the emissions.**

Note: **Non-compliance with any of these three Duties in the event of a "life threatening" incident could be reason for enforcement action including prosectuation.**

AGREEMENT

RELATIONSHIP OF "DUTIES" TO C.A.E.R.

- Duties similar to C.A.E.R. Program
- (All members of CCPA implement C.A.E.R. as a condition of membership)
- Onus on operator for mechanism to protect health, safety and environment
- Hazard/risk assessment is required
- Operator required to examine all aspects of plant operations
- Operator required to develop an emergency response plan
- Specific response by operator required in an emergency

"LIFE THREATENING" SITUATIONS

Option: "Never to be Exceeded"

(Based on TLVs, Ambient limit or emission limit or both)

Advantages	Disadvantages
Reflects "life threatening" situation.	
Specific value that is understandable to the legal profession.	For many chemicals lack of specific criteria for limit development. Difficulty in determining a suitable limit value.
Monitoring substantiates and quantifies the actual release/impact.	Monitoring problems, too many parameters to consider.
	The due diligence concept could obviate against programmed action.
	Difficulty in determining a suitable limit value.

GOOD CONCEPT, DIFFICULT TO MONITOR

OTHER OPTIONS FOR ENFORCEMENT

"Harm to the Environment"

Could be Difficult to Define

Could be Difficult to Prove

"Specific Numerical Data"

Could be Difficult to Obtain

Could be Difficult to Prove

(Relates to "never to be exceeded" limits)

SECTION - III

TERMS OF REFERENCE:

ONE: Maximum limits on frequency, duration and number of start-ups.

THREE: Detailed requirements for minimizing emissions during start-up and shut-down.

FOUR: Compliance with emission standards during start-up, shut-down and emergency upset conditions.

OPTION ONE

Change license or permit to construct

FURTHER INPUTS

ONE: MAXIMUM LIMITS ON FREQUENCY, DURATION AND NO. OF START-UPS

Agreement:

- Not Techically Feasible
- Not the Intent in License.
- Start-ups Frequency Based on Experience.
- Economic Considerations May Dictate Frequency.

Other Aspects:

- Consider limits for not so responsible Operation.
  - Notification period for start-up
- Not expected to reduce poor compliance.

THREE: DETAILED REQUIREMENTS FOR MINIMIZING EMISSIONS.

Two Options:

1. **Department develops requirements.**

2. **Department/industry jointly develop operational requirements.**

Option 2 appears feasible and should be further investigated.

FOUR: COMPLIANCE WITH EMISSION STANDARDS

Comments:

- Interpreted as "normal" emission standards.
- Difficult under present license system.
- Applicable if no difference between start-up and "normal" modes.
- Relates to "never to exceed" limits.

Suggestions:

- Mass emission per time period better than concentration.
- Statistical process control should be taken into account.
- Air emissions different from liquid effluent.

OPTION ONE: CHANGE LICENSE OR PERMIT TO CONSTRUCT

ERCB can change license conditions.

Present System:

- **Cycle of license review (five years)**
- **Objective of consistency in monitoring requirements.**

Potential Approach:

- **Extend scope of Control Order**
- **Change legislation**
- **Minimize license changes**

Further Study

FURTHER INPUTS

- INDIVIDUAL COMPANY PRESENTATION
- INDUSTRIAL ASSOCIATION PRESENTATION
- ADVISORY COMMITTEE/WORKING GROUP TYPE OF INPUT

CONCLUSION

THE CONSULTATIVE PROCESS WORKS

PANEL OPERATION

Objectives

Objectives as specified, based on input from K. Smith at the first meeting of the Task Force on September 2, 1987:

- Improve the present enforceability of regulations
- Meet with various groups and agencies to receive input on enforcement
- Examine technical and legislative aspects of enforcement
- Present an Action Plan to the Minister of Environment
- Completion Date: October 31, 1987

Schedule

"Fast track" schedule to meet the Minister's requirements.

Focus of the Task Force

- The Panel wishes the industry organizations to focus on start-up, shut-down and non-normal operations, recognizing the interest of the Panel is very broad.
- The key is the development of principles and concepts relating to how to regulate rather than details on how the regulatory mechanism will work.
- Enforcement is a very complex topic, with many inter-related aspects.
- It could be difficult to develop concepts and principles on a group basis.
- It might be necessary for the Panel to receive input from individual industries in order to obtain a complete understanding of the issues involved.
- It is recognized that handling commissioning, start-up, shut-down and emergency events is difficult; nevertheless, the Panel prefers a multi-industry position on concepts and principles rather than input from single industrial operations.

REFERENCE VIEWGRAPH I-2

Approach of the Minister

- o It is intent of the Minister to make changes and improve the present system.
- o It is not the intent of the Minister to make major changes in the present system.
- o Present consultative compliance and enforcement has been good and the Department will continue its present approach in dealing with industry.

Industry Representation on the Panel

- o Industry representation on the Panel is through A. Hyndman.
- o The Panel will select specific companies to make written submissions by the first week of October, 1987.
- o The Panel will meet with a few of those making submissions.

Completion of Panel Activities

- o The culmination of the activities of the Panel is the formulation of an Action Plan that could include the development of other committees and other avenues of input from industry.
- o The type of Action Plan can only be determined once the Panel has completed its work by (October 31, 1987).

REFERENCE VIEWGRAPH I-2

TASK FORCE

(OBJECTIVES)

TASK FORCE ON THE REVIEW OF MONITORING AND ENFORCEMENT ISSUES ASSOCIATED WITH START-UP, SHUT-DOWN AND EMERGENCY UP-SET SITUATIONS

PROPOSED TERMS OF REFERENCE

I. **Mandate**

- o Review the existing enforcement system for the control of emissions during start-up, shut-down and emergency up-set situations.
- o Present recommendations for improvements to the Enforcement Review Panel.
- o Focus the recommendations on principles and concepts for improving the existing enforcement system.
- o De-emphasize technological methods for controlling emissions

II. **Monitoring and Enforcement Issues**

Review of the monitoring and enforcement issues associated with the control of emissions during start-up, shut-down and emergency up-set situations.

Provide:

A. Overview of existing start-up and shut-down practices, including frequency, number and duration.

B. Overview of potential problems during start-up and shut-down situations including environmental and safety concerns.

C. Overview of potential monitoring problems during start-up, shut-down and emergency up-set situations (include data availability and reliability).

D. Overview of potential enforcement problems associated with controlling emissions during start-up, shut-down and emergency up-set situations.

THUS: NO MAJOR CHANGE TO EXISTING SYSTEM

REFERENCE VIEWGRAPH I-4

III. Recommendations

- Potential regulatory mechanisms for controlling emissions during start-up, shut-down and emergency up-set situations.
- Range of options to include:
  1) Setting maximum limits on the frequency, duration and number of start-ups.
  2) Setting maximum limits on emissions that can be released under any situations.
  3) Establishing detailed requirements for minimizing emissions during start-up and shut-down.
  4) Requiring compliance with emission standards during start-up, shut-down and emergency up-set situations.
  5) Exempting start-up, shut-down and up-set situations from complying with emissions standards.
- Consider to what industrial classes or categories the recommendations should apply, and how the recommendations could be implemented.

REFERENCE VIEWGRAPH I-4

3. PRESENT COMPLIANCE SYSTEM

Alberta Environment use two approaches to regulating industrial operations:

(1) technological based limits
(2) limits set for environmental protection

A combination of best practical technology, dispersion modeling and ambient monitoring are used to establish limits for operations.

Start-up, and shut-down operations defined on a plant specific basis. It is expected that higher level emissions might occur during unforeseen events such as equipment breakdown, and the concept of "due diligence" would be applied.

It is not intended that there should be unlimited releases during normal start-up; there is a need to control releases to ensure there are no adverse environmental effects from a plant that is operated with due diligence.

Waivers are specific to few licenses and could apply to certain start-ups. (Examples are given in the table taken from the Minister's Briefing.) There is an exemption in the General Regulations such that certain types of industrial operation not require licenses to operate.

The provision of a Certificate of Variance was provided in legislation in the late 1970's.

Specific tests must apply for the granting of a Certificate of Variance:

(a) the plant, structure or thing is operating or is likely to operate in contravention of a term, condition or requirement of a permit or license or a requirement of the regulations as a result of factors beyond the control of the applicant.

(b) the variation is not likely to result in air pollution of a degree that could be detrimental to life or health or adversely affect property, and

(c) a refusal to grant a certificate of variance would result in serious hardship to the applicant without an offsetting benefit to others.

The Certificate of Variance is reviewed by Standards and Approvals, and signed by the Minister. It can apply to any regulated standard (ambient and source) and, to date, the Minister has not waived ambient limits.

NOTE: RECOMMENDATION FOR PROSECUTION CAN OCCUR AT ANY STAGE IN THE HIERARCHY

REFERENCE VIEWGRAPH I-5

PLANTS THAT CONTAIN A WAIVER CLAUSE FOR START-UPS OR SHUT-DOWNS

Fertilizer Plants	3
Tar Sands Plants	2
Chemical Plant (Sulfuric acid)	1
Refineries	3
Pulp and Paper Plants	2
Cement Plant	2
Coal Fired Power Plants	6
Foundries	3
Coal Cleaning Plant	1
Wood Processing Plants	20
Sour Gas Plants	2
TOTAL	45

REFERENCE VIEWGRAPH I-5

ALBERTA ENFORCEMENT HIERARCHY

TECHNICAL: Positive interaction with facility.

DIRECTIVE: Hearing with Management - Formalized action plan required - News Release

CONTROL ORDER: A legal document, served on facility requiring specific action in a definite time period.

STOP ORDER: A legal document issued by the Minister of Environment for the immediate control of an emission.

PROSECUTION: A recommendation may be made to the Attorney General's Department for prosecution for:

(1) Continued contravention contrary to direction.

(2) Non-compliance with regulations, Control Order or Stop Order.

(3) Negligence or indifference.

(4) Deliberate acts resulting in pollution.

(5) Serious environmental pollution.

Note: (1) Prosecution may be implemented at any stage of the enforcement hierarchy.

(2) Experience has shown that compliance can be achieved most effectively by the use of technical discussion. Directives, Control and Stop Orders.

NOTE: THIS INFORMATION PROVIDED BY ALBERTA ENVIRONMENT

REFERENCE VIEWGRAPH I-6

EMISSION

Three emission limits might be considered, depending on the level of emission:

Limit 1: "Life Threatening"

Should be a requirement for notification.

Failure to meet this requirement could be cause for enforcement action, possibly prosecution.

May be difficult to have the "life threatening" cause itself reason for enforcement action because of potential difficulty in proving the "life threatening" situation.

Limit 2: Nuisance, Odour, or Loss of Enjoyment

Limits set for this category should be greater than for normal process operations.

Presumably the Department can take action based on present regulations.

Potential Issues:

- Allowable duration of the emission.
- Can the duration be specified.

Limit 3: Normal Plant Operations

At least 95% of plant operations meet this limit.

Specified technology based limit values already in place would be significantly lower (tighter) than for Limits 1 and 2.

REFERENCE VIEWGRAPH II-4

CATEGORIES OF LIMITS

(Commentary)

The concept of "due diligence" is difficult to quantify, hence the three categories of limits:

- Statistical process variations should be taken into account in setting technical limits.
- There was a problem with existing licenses because the limits were based on technology of equipment under normal operating conditions and do not take account of all aspects of the operation (commissioning, start-up, shut-down, etc.).
- The Department has, in general, only examined the capability of the technology under normal operating conditions.
- There might be a large difference in capability, depending on the operational category.

Concerns:

- The present limits applied to only one operational category of the plant, i.e. "normal"
- There appeared to be a need for an understanding of "normal industrial operation" in consideration of the categories of limits.
- Variability in emissions at start-up, shut-down and during normal plant operations.
- Variability in emissions and variability in monitoring not completely taken into account in licenses.

REFERENCE VIEWGRAPH II-6

USE OF LIMITS

The present approach of the Department to environmental control using the source permit approach works satisfactorily.

Concerns:

- Limits based on "non-normal" operations that excluded recognition of variability in the process;
- Distinguish clearly between normal operations and special cases such as commissioning.
- Include coercive measures in the act/regulations in order that they be generally applicable rather than in a specific company license.

Alternative:

- o Set a standard that would be met 99% of the time with a maximum permitted number of hours during which this value could be exceeded, with a maximum ceiling.
- o Set on a case by case basis.
- o Raise questions whether the ceiling limits and the allowable time were "reasonable".

Public Issues:

- o If a limit were exceeded, it could be perceived as life threatening.
- o Additional information needed, particularly if the Department appeared to take no action on an exceedence during "normal" operations.

REFERENCE VIEWGRAPH II-6

WAIVER CLAUSE

FIVE: **Exempting start-up, shut-down and upset situations from complying with emission standards.**

Equates to the "waiver" clause, as in the Western Coop license.

Issues:

- **In Clause 4.1 in the Western Co-op Ltd. (WCL) license, whether it was "reasonable".**
- **Whether a waiver clause should be included/excluded in the license.**
- **Whether start-up should be addressed in the license for some/all industries**
- **Should start-up be excluded completely from licenses.**
- **No limit on emissions provided "reasonable care was taken".**
- **Health and environment effects are not addressed.**
- **A grey area associated with "nuisance".**
- **Necessary to narrow the range of the effects to be considered. One option is that the waiver be operable for a limited period of time and that normal operating conditions should be reached as soon as possible.**
- **At the present time, very few waiver clauses in licenses**
- **Waiver could be considered to represent the recognition of plant operations.**

AGREEMENT:

- **Discontinue use of "waiver" clause without an upper limit.**
- **Use alternative ("DUTIES" - C.A.E.R. based)**

(Community Awareness and Emergency Response)

REFERENCE VIEWGRAPH II-8

THREE DUTIES

These steps were similar to those in the CAER program (Community Awareness and Emergency Response) that all members of the Canadian Chemical Producers' Association had adopted in order to be members of that Association.

Implication is that the onus is on the operator to have a mechanism in place to protect health and the environment, and it is not unreasonable to expect the operator to meet the three requirements.

Non-compliance with any of the three requirements in the event of a "life threatening" incident should be reason for prosecution.

These requirements could be included in the acts/regulations. It was emphasized that violation of technical limits should not necessarily be the basis for a court action, and political limits should not be the basis for court action.

The concept of the Duties should apply to the five categories of operation and that any category should not be singled out since the "life threatening" situation could apply to all type of industrial operation.

REFERENCE VIEWGRAPH II-9

C.A.E.R.

(Hazard Assessment and Emergency Procedures)

The C.A.E.R. program requires the operator to examine all aspects of plant operations.

The basis of the C.A.E.R. Program is prevention, rapid response and rapid communication in regard to an emergency situation.

Should the C.A.E.R. principles be included in the License to Operate, and if they were, and if all the principles were not carried out, the operator would be deemed to be in a situation of non-compliance. (It was considered there could be some difficulty in applying the principles through the license procedures.)

A simpler approach would be to put the requirement for the C.A.E.R. principles in the Regulation, or in specific Permits to Construct, and this would include risk assessment, emergency plan and communication plan. It is expected that this type of information included in the Application for the Permit to Construct, could be included as part of the license.

Thus, Alberta Environment would be able to use existing enforcement tools, such as control orders.

The operator would be deemed to be in non-compliance if all the enforcement tools applied to all the stages of the C.A.E.R. Program, it would be an offense on the part of the operator not to carry out those actions specified in the license; thus the enforcement hierarchy could be used in modifying operations rather than proceeding directly to prosecution.

This is evidently an area that requires further investigation.

REFERENCE VIEWGRAPH II-10

ALTERNATIVE OPTION TO "WAIVER": OPERATIONAL RESPONSE (C.A.E.R.)

The approach taken in the C.A.E.R. Program should be considered, in that specific numerical data are not required, but a specific response by industry to a given situation is mandatory. This could be translated into an offense being non-response to an incident.

In developing the emergency response part of the C.A.E.R. Program, evaluation of the worst case conditions is carried out; it is difficult to quantify all worst case situations.

Emphasis should be on following procedures rather than on quantities of pollutants emitted, and it is suggested that if industry followed all specified procedures, industry should not be charged if there is harm to the environment.

The objective is to improve industrial codes of practice for certain industry operators, and it is suggested that emergency response requirements could be put in a license, similar to the following:

> **"The operator shall take all practical steps to control and prevent releases during upsets that might adversely affect environment, health, safety."**

This requirement is similar to that for sour gas plant operators, in that the ERCB approved the contingency plan submitted by the operator, and the operator is required to communicate the contingency plan to the "publics".

The requirement for an emergency response plan would permit the Department to check if the operator had followed the requirements, and it could provide a basis for measuring operator performance. It was pointed out that it would not be feasible for the Department to review operational procedures that could be complex and detailed.

This approach is simpler than proving exceedence of specific numerical limits.

A potential disadvantage is that the onus is on the regulatory authority to prove that all practical steps had not been taken; if an operator were required to submit an emergency plan, this could form a basis for the regulatory authority determining the appropriate action had been carried out.

In regard to sour gas plant operations, scenarios for high risk situations such as pipeline rupture are considered;

REFERENCE VIEWGRAPH II-10

"NEVER TO BE EXCEEDED" LIMITS - 1

(Terms of Reference: TWO)

TWO: Setting maximum limits on emissions that can be released under the any situations.

One concept is a maximum limit that could never be exceeded under any circumstances. There could always be a situation that would not be covered by a license unless there were a mechanism that would take account of a situation where a "never to be exceeded" number was, in fact, exceeded during unforeseeable circumstances. This related to development/operation of a contingency plan to deal with this type of situation.

Ideally, these limits could be set, but in practice it may not be feasible. The present technology for certain operations is such that emission limits at start-up are not known. In addition, it would be difficult to monitor.

These limits could possibly be used where there is sufficient data available (human and environment toxicity data) and the enforcement system should be able to accommodate the use of this type of information. Although there may be very few operations at the present time to which it could be applicable, this should not preclude its use in the future.

It is suggested that a number of items in the license were not emission related (such as stack exit temperature) and these related more to plant operation and not to environmental protection.

The information requirements in the license could possibly be divided into two groups:

Group 1: Data used for environmental protection.

Group 2: Data used for showing satisfactory plant operation.

Thus, it should be possible to distinguish between serious license conditions and operational information items. (The Department is not unanimous regarding this approach).

REFERENCE VIEWGRAPH II-11

"NEVER TO BE EXCEEDED" LIMITS - 2

The question is raised whether the onus of proof for a "not to be exceeded" situation would be on the Regulatory Authority to show the plant had not operated with "due diligence," or whether the onus would be on the operator to show that he took all necessary steps during his operation.

One option could be for the court to decide whether there was "due diligence" and an alternative might to be to specify in the regulation what steps the company should take to demonstrate due diligence.

Calculation of specific limits could be in terms of their relationship to an accepted standard, e.g., TLVs, etc., and if specific limits were given, they could be site specific and a contingency plan should be required from the operator. The need to take immediate action could provide the government and industry some opportunity to inform the public.

There could be difficulty in monitoring a "never to be exceeded" limit in terms of emissions and ambient levels. It might be possible to control by time limited operations rather than monitoring.

If the concept of a "not to be exceeded" limit was agreed, then the concept of execution of the Duties, discussed above, could form the basis for legal action. It is presumably feasible that legal action could still be initiated even if the three Duties had been carried out where the incident was related to negligence on the part of the operator.

It appears that if enforcement were on the basis of an absolute "not to be exceeded" limit, prosecution might not automatically follow, if the concept of due diligence applied and the operation were found to have performed with due diligence.

There could be difficulties with providing a limit value in terms of both specifying a reasonable value and determining how it could be measured. Presumably, exceedence of the limit value would require proof by the Regulatory Authority, with implications for sampling/analysis.

There is concern regarding use of "never to exceed" limits applied to discharges to water environments because of monitoring requirements and the specification of limit values. It might be possible to accept "never to exceed" limits if they were applied to chemicals that have accepted standards such as TLVs.

It had been suggested that there could be two types of "never to be exceeded" limits:

Type 1 - No Defense
Type 2 - Disputable

This concept has been discussed and generally rejected because of difficulty in application.

The objective is to develop a pro-active approach for prevention of situations which could affect the health and safety of the public or damage the environment rather than develop a limit that could not be enforced.

REFERENCE VIEWGRAPH II-11

There were a number of related concerns regarding "never to be exceeded" limits:

1. Guidelines would be required both for the operator and the regulator in using the three Duties and a judgment call would be required to determine in a specific case if the operator had carried out all the Duties.

    - o There could be large increases in monitoring costs in order to "capture" "life threatening" concentrations of specific parameters.

    - o It was expected that new source and ambient monitoring equipment would be required for the concentration ranges that would result in a "life threatening" situation.

2. If one of the three Duties were not carried out, the Department might only consider court action (rather than making the court action automatic).

3. If the government reviewed the operator's contingency plans and found them satisfactory and the plans proved not to be satisfactory in the event of a "life threatening" situation, the operator might still be faulted.

In regard to municipalities, the municipality was considered responsible for noxious material in the system even if the municipality did not know its origin or composition. The onus would be on the municipality to show the discharge was beyond its control; and it was considered that enforcement should be on the basis of a limit value.

Other Comments:

- o Calculated limits could be developed from source emissions based on an event that could happen.

- o The "never to exceed" limit could be incorporated into plant operations such that specific contingency plans and other actions would be initiated as a result of the limit being approached.

- o It would be very difficult to develop and reach mutual agreement on limit values and to provide the public with these limits, considering the public would expect enforcement if the limit were exceeded.

REFERENCE VIEWGRAPH II-11

OTHER OPTIONS

It is appropriate to assess those situations that could result in court action, and these potential situations should be determined prior to changes in the enforcement system. If prosecution were based on environmental situations that were not particularly serious, it could result in very little use of the legal process because of the general nature of the framework for prosecution. In developing any type of enforcement system, the present system and the way it operates should be taken into account.

There are two options also considered:

Option 1	No harm (damage) to the environment
Option 2	Specific numerical limits

From a legal perspective, specific numerical limits were preferred, but this is almost impossible for ambient monitoring or source monitoring. The specification of "no harm to the environment" is difficult to quantify.

Advantages and disadvantages of these two options, in addition to other comments are presented:

(a) **Option 1 - "No harm to the environment."**

A related item is to determine what constitutes "harm to the environment." This could be very difficult to prove.

Inclusion of this requirement as a license condition could make industrial operations very difficult. The question is raised how this could be measured and in terms of damaging the environment (i.e., an individual).

It is understood that this approach is taken in Ontario, where individuals who see or experience the specific emission are used as witnesses. This avoids the problem of measuring concentration of the pollutant. There is some concern regarding reliability of witnesses.

There is provision through common law for an individual to take court action against a specific company regarding "harm to the environment"; it is understood that it is more difficult to prove a criminal action (through the Act) rather than a civil action (through common law).

The existing licensing system provides for reasonable steps to be taken by the operator, and some changes are required, as outlined previously.

(b) **Option 2 - "Specific Numerical Data"**

These data could be difficult to establish. It could also be difficult to set a specific maximum limit against which these data would be assessed. The previous discussion on "never to be exceeded" limits is relevant to this discussion.

Numerical limits removes the discretional element in operations, and could provide some relationship between the emissions and "harm to the environment."

REFERENCE VIEWGRAPH II-12

TERMS OF REFERENCE

ONE: Setting maximum limits on the frequency, duration and number of start-ups.

This is not technically feasible; it is not considered that the intent of the license is to address limits on the frequency, duration and number of start-ups, but to regulate an industrial operation in order to protect the environment.

The number of start-ups can only be based on experience, and it might not be within the operator's control, as in the case of power failures, etc.

The imposition of maximum limits and number of start-ups and shut-downs might imply interference in a commercial operation; in addition, economic considerations dictated the minimization of the number and duration of start-ups because of associated costs, and because of loss of product.

General Agreement: Not Feasible to set these maximum limits.

Improvements might be in requiring notification of start-up and shut-down procedures; it would be very onerous if the Department was required to approve start-ups and shut-downs.

Conclusion: It is agreed that maximum limits should not be set for a responsible operator, but could be set (considered) for not so responsible operators.

There could be some exemptions:

- In the case of duration, if an operator had notified a two week start-up period, there could be some merit in further notification if the two week period was being extended significantly.

- The requirement to notify the start-up and start-up period should only be required if the operator were permitted to emit at a higher limit during start-up compared to normal operations; in the latter case, there would be no reason for a time limit on start-up. The problem occurrs in setting limits on frequency, duration and number of start-ups.

  It is not expected that setting limits on the frequency of start-up (as opposed to reporting requirements) would reduce the frequency of major unreported incidents.

REFERENCE VIEWGRAPH III-2

THREE; **Establishing detailed requirements for minimizing emissions during start-up and shut-down.**

There are two options:

Option 1: The Department develops the detailed requirements.

Option 2: The Department and industry jointly agree to operational requirements.

There is general agreement that Option 2 is feasible; it is also agreed that this was equivalent to the application of the C.A.E.R. approach, it should be feasible and it should be given further consideration for application to licenses.

If the start-up were required to be below the "never to be exceeded" limit, it was feasible that a plant could never start-up. (At the present time if the technical limit were exceeded during start-up, there is a reporting requirement.).

REFERENCE VIEWGRAPH III-3

FOUR: Requiring compliance with emission standards during start-up, shut-down and emergency upset situations.

This is interpreted as requiring a set level, with which there must be compliance, independent of the operating mode.

This is generally agreed to be difficult under the present license system; however, if there were a change in approach in the licensing system and account were taken of statistical process control over the different modes of operation, and built into the development of limits, this might be feasible. This is a possible area for further discussion.

These emission standards were interpreted as "normal" emission standards, and could be applicable where there would be no expected difference between start-up and normal operations, as in the case of liquid effluents, for example, lagoons. It was recognized that this could not be applied to air emissions where the difference in effluent quality could be significantly different at start-up compared to normal operations.

In comparing air emissions with liquid effluents, it is relatively easy to take a liquid sample and retain it; in contrast to an emission to the atmosphere.

In terms of air emissions, a limit in weight per given time period is more appropriate than the concentration, in order to have some flexibility and "leveling" effect on the emissions. This would be required on a plant specific basis, and an objective could be to attain a minimum mass emission rate during start-up. (The stack emission limit related more to plant operations rather than environmental protection.)

REFERENCE VIEWGRAPH III-4

OPTION 1

(New Option) Change the license or permit to construct.

It is possible that there could be a detail of the risk assessment process "missed" and result in a non-compliance situation. Possibly the Department could issue a control order that would require the license to be modified.

At the present time, only monitoring requirements can be changed in the license before the terms of the license is ended and at the initiation of the Director. There is a cycle of license review, set up to ensure industry has a consistent license to operate under for a significant period of time (five years). This applies to both Air and Water Licenses.

An existing license might be changed on application from the operator; however, there is concern in using this approach if there were disagreement between the operator and the Department regarding the need to change the license.

At the present time, the E.R.C.B. had this ability to change permit conditions.

In order to open the license, it would be necessary to open the license or extend the scope of the Control Order, for which the Act would probably have to be changed.

It is suggested the Department could have the ability to initiate changes in the license, and changes in legislation might be required for this proviso. However, such initiation of license changes should be minimal, in order to avoid continuously changing limits with which industry must comply.

It is suggested that this Option requires further study.

REFERENCE VIEWGRAPH III-5

OPTION ONE - SUMMARY APPROACH

Application to Existing Plant Operations.

1. **Modify Permit to Construct to include:**

   (a) **Risk assessment for possible emissions**

   (b) **Maximum level of emissions and/or procedures for:**

   - **start-up**
   - **shut-down**
   - **emergencies**

   (c) **Dispersion conditions considered for item (b)**

   (d) **Emergency plans, including notification**

2. **Commissioning of Plant/Process**

   Modify License to Operate

   (a) Compliance with the Permit Application

   (b) - open the license

   - issue control order if not in Permit to Construct

3. **Hierarchy of Enforcement**

   Same procedures for:

   o license application

   o normal license renewal

August 31, 1987

PROVINCE OF BRITISH COLUMBIA

MINISTRY OF ENVIRONMENT AND PARKS

ENVIRONMENTAL LAW ENFORCEMENT

Background

- Development of Ministry
- Pollution Control Branch 1976-1980
  Permitting/Enforcement
- Waste Management Branch 1980-1987
  Permitting/Enforcement
- Creation of the Conservation Officer Service
  Mandate

Organization of Ministry of Environment

- Regions/districts
- Program delivery

Definitions

- Administrative enforcement
- Operational Enforcement

Operational/Administrative Interface

- Environmental Co-ordinator
- Institution of investigations/enforcement
- Enforcement/management co-operation
- Enforcement/Crown Counsel
- Enforcement/Courts
- Legal/Charter

Quality Control

- Prosecution Committee
  - make up
  - mandate
  - rationale
- Prosecutorial Support
  - weaknesses
  - special prosecutors

Recruitment of Enforcement Personnel

- Qualifications
  Ontario/British Columbia
- Training

Recommendations

- Licences and permits
- Personnel
- Training
- Legal support
- The Judiciary
- Policies and procedures

AUGUST 27, 1987

BACKGROUND

THE MINISTRY OF ENVIRONMENT WAS CREATED IN 1976 OUT OF THE FORMER WATER RESOURCES SERVICE AND INCLUDED, AMONG OTHERS, THE LAND MANAGEMENT BRANCH, WATER RESOURCES BRANCH, POLLUTION CONTROL BRANCH AND THE ENVIRONMENTAL LABORATORY.

IN 1979, THE MINISTRY OF ENVIRONMENT WAS REORGANIZED AND THE LAND MANAGEMENT BRANCH WAS LOST TO ANOTHER MINISTRY. THE FISH AND WILDLIFE BRANCH WAS BROUGHT INTO THE MINISTRY OF ENVIRONMENT FROM THE OLD MINISTRY OF RECREATION AND CONSERVATION, WHICH WAS DISMANTLED.

IN THE FALL OF 1986, THE PARKS BRANCH WAS ADDED TO THE MINISTRY AND ITS NAME BECAME "MINISTRY OF ENVIRONMENT AND PARKS". BRANCHES. - RECREATIONAL FISHERIES - PESTICIDE CONTROL. - WILDLIFE - WASTE MANAGEMENT - CONSERVATION BRANCH. - WATER OR CONSERVATION BRANCH

IN 1981, THE CONSERVATION OFFICER SERVICE WAS CREATED WITHIN THE MINISTRY AND BECAME ITS INVESTIGATIVE AND ENFORCEMENT ARM.

FROM 1976 TO 1981, THE GOAL OF THE MINISTRY OF ENVIRONMENT AS IT APPLIED TO THE POLLUTION CONTROL BRANCH, AS IT WAS THEN KNOWN, WAS TO BRING ALL DISCHARGES UNDER PERMIT. THE GOAL FROM 1981 TO THE PRESENT, WAS AND IS TO BRING ALL DISCHARGES INTO COMPLIANCE WITH THE TERMS OF THE PERMITS THROUGH MONITORING, NEGOTIATING OR PROSECUTING AS DEEMED APPROPRIATE UNDER APPROVED PROCEDURE ON A CASE BY CASE BASIS.

THE CONSERVATION OFFICER SERVICE, ~~AS IT CAME TO BE KNOWN, WAS~~ HEADED UP BY THE CHIEF CONSERVATION OFFICER WHO REPORTS TO THE A/DM ENVIRONMENT IS MADE UP OF ALL THE ENFORCEMENT CONSERVATION OFFICERS FORMERLY ATTACHED TO THE FISH AND WILDLIFE BRANCH. THE INVESTIGATIVE AND ENFORCEMENT MANDATE OF THE CONSERVATION OFFICER SERVICE WAS BROADENED CONSIDERABLY, UNTIL TODAY, THE CONSERVATION OFFICER NOT ONLY ENFORCES THE TRADITIONAL FISHERIES AND WILDLIFE LEGISLATION, BOTH FEDERALLY AND PROVINCIALLY, BUT ALSO ENFORCES THE WASTE MANAGEMENT ACT, THE WATER ACT AND THE PESTICIDE CONTROL ACT. IT INTERFACES WITH ALL THE OTHER BRANCHES ~~THE CHIEF CO REPORTS TO THE A/DM ENVIRONMENT~~

Amended code Environmental Control Act - Special Provincial Constable

~~I AM ADVISED THAT~~ ONE OF THE REASONS THE FISH AND WILDLIFE BRANCH WAS WELCOMED INTO THE MINISTRY OF ENVIRONMENT IN 1979 WAS BECAUSE THEIR EXISTING ENFORCEMENT COMPONENT OF 110 UNIFORMED OFFICERS COULD, WITHOUT TOO MUCH REORIENTATION, TAKE UP THE ADDITIONAL DUTIES OF ENFORCING THE ENVIRONMENTAL LEGISLATION. FROM A POLLUTION CONTROL POINT OF VIEW, THEY CONSTITUTED A "READY MADE" ENFORCEMENT CAPABILITY. THEIR EXPERIENCE IN INVESTIGATING AND PROSECUTING OFFENCES UNDER SECTIONS 31 - 33 OF THE FEDERAL FISHERIES ACT WAS DIRECTLY APPLICABLE TO OFFENCES UNDER THE POLLUTION LEGISLATION.

MATCHUP - 16. F+W ENFORCEMENT + ENVIRONMENTAL ENFORCEMENT

THIS IS NOT UNIQUE - NEW YORK STATE, MICHIGAN STATE, AMONG OTHERS, ALSO USE CONSERVATION OFFICERS AS THEIR MAIN ENVIRONMENTAL ENFORCEMENT GROUP. BUT I BELIEVE IT IS UNIQUE IN CANADA.

16 years.

RESISTANCE FROM HUNTING + FISHING GROUPS - RESPONSIBILITY DISASTEROUS TO REGULAR DUTIE

HOWEVER TODAY, FISH AND WILDLIFE ENFORCEMENT CONTINUES TO BE THE PREDOMINATE TIME CONSUMER AT ABOUT 90 TO 95 PER CENT OF THEIR OPERATIONAL TIME WHILE ENVIRONMENTAL ENFORCEMENT - WASTE MANAGEMENT, WATER AND PESTICIDE CONTROL CONSTITUTES 5 - 10 PER CENT, DEPENDING ON THE AREA OF THE PROVINCE.

ORGANIZATION

THE MINISTRY OF ENVIRONMENT AND PARKS IS A DECENTRALIZED ORGANIZATION WITH THE ENVIRONMENT PORTION COMPRISED OF FIVE REGIONS, 1) VANCOUVER ISLAND, 2) LOWER MAINLAND, 3) SOUTHERN INTERIOR, 4) KOOTENAY AND 5) NORTHERN. THERE ARE FIVE ENVIRONMENT REGIONAL DIRECTORS WHO ARE RESPONSIBLE FOR PROGRAM DELIVERY IN THEIR RESPECTIVE REGIONS. REPORTING TO EACH REGIONAL DIRECTOR ARE FIVE REGIONAL MANAGERS, RESPONSIBLE FOR DAY TO DAY ACTIVITIES OF THE CONSERVATION OFFICER SERVICE, WATER MANAGEMENT, WASTE MANAGEMENT, FISH AND WILDLIFE MANAGEMENT AND PESTICIDE MANAGEMENT STAFF.

THE REGIONAL DIRECTORS ARE RESPONSIBLE TO THE ASSISTANT DEPUTY MINISTER (ENVIRONMENT) FOR THE DELIVERY OF ALL PROGRAMS AND SERVICES OF THE MINISTRY.

RESPONSIBILITIES

AS IT INTERRELATES WITH THE WASTE, WATER AND PESTICIDE PROGRAMS, THE CONSERVATION OFFICER SERVICE IS RESPONSIBLE FOR OPERATIONAL ENFORCEMENT. THIS IS AS OPPOSED TO ADMINISTRATIVE ENFORCEMENT. PERHAPS A DEFINITION OF THESE TERMS, I.E., OPERATIONAL AND ADMINISTRATIVE WOULD BE USEFUL HERE.

WE DEFINE ADMINISTRATIVE ENFORCEMENT AS, ISSUING LICENCES, PERMITS, ORDERS AND APPROVALS, SETTING POLICY, NEGOTIATING AND FORMULATING TERMS AND CONDITIONS OF LICENCES, PERMITS AND APPROVALS WHERE AUTHORIZED BY LEGISLATION AS WELL AS ONGOING MONITORING OF TERMS AND CONDITIONS. ADMINISTRATIVE ENFORCEMENT IS THE RESPONSIBILITY OF THE PROGRAM AND IS CARRIED OUT BY THEIR "MANAGEMENT" OR "ABATEMENT" STAFF.

OPERATIONAL ENFORCEMENT, FOR WHICH THE CONSERVATION OFFICER SERVICE IS RESPONSIBLE, MEANS ANY INVESTIGATION INTO POSSIBLE VIOLATIONS OF THE ENVIRONMENTAL LEGISLATION. THIS INVESTIGATION MAY OR MAY NOT RESULT IN PROSECUTION DEPENDING ON THE EVIDENCE DEVELOPED, THE CIRCUMSTANCES OF EACH OCCURRENCE AND THE VARIOUS ALTERNATIVE ACTIONS ALLOWED WITHIN THE LEGISLATION ITSELF, HOWEVER, THE INVESTIGATION MUST BE CONDUCTED IN A MANNER ACCEPTABLE IN COURT, AS PROSECUTION WILL BE A CONSIDERED OPTION IN EACH CASE.

IN OTHER WORDS, THE CONSERVATION OFFICER SERVICE STAFF ARE THE INVESTIGATIVE EXPERTS AND THE ~~PROGRAM~~ ABATEMENT STAFF, THE TECHNICAL EXPERTS.

PRACTICAL

THERE ARE 47 DISTRICT OFFICES ACROSS THE PROVINCE MANNED BY 160 CONSERVATION OFFICERS. EACH DISTRICT IS RESPONSIBLE FOR INVESTIGATING ENVIRONMENTAL OFFENCES WITHIN THEIR AREA.

TWO REGIONS, THE LOWER MAINLAND REGION, WHICH INCLUDES VANCOUVER AND THE FRASER RIVER VALLEY, AND THE NORTHERN REGION, ESPECIALLY AROUND PRINCE GEORGE AND THE NORTHEAST COAL DEVELOPMENT, BOTH OF WHICH ARE HEAVILY INDUSTRIALIZED, HAVE DEVELOPED AN ENVIRONMENTAL CO-ORDINATOR; A CONSERVATION OFFICER WHO SPECIALIZES IN INVESTIGATING WASTE MANAGEMENT OFFENCES. BASED AT REGIONAL HEADQUARTERS, THE ENVIRONMENTAL CO-ORDINATOR IS AVAILABLE TO ALL DISTRICTS WITHIN THE REGION FOR AID IN INVESTIGATING MAJOR AND UNUSUALLY COMPLICATED CASES.

WHILE THE CONSERVATION OFFICERS HAVE CARTE BLANCHE AUTHORITY TO INVESTIGATE AND CHARGE UNDER THE WILDLIFE AND FISHERIES ACTS, INVESTIGATIONS AND ENFORCEMENT UNDER THE ENVIRONMENTAL LEGISLATION ARE ONLY UNDERTAKEN AT THE REQUEST OF THE REGIONAL WASTE AND PESTICIDE MANAGERS OR A REGIONAL DIRECTOR. (SEE WASTE MANAGEMENT AND CONSERVATION OFFICER SERVICE PROCEDURE)

IN THE VAST MAJORITY OF INVESTIGATIONS, CONSERVATION OFFICERS WORK HAND IN GLOVE WITH THE TECHNICAL STAFF OF THE VARIOUS PROGRAMS. THE CONSERVATION OFFICERS ENSURE THAT ALL ASPECTS OF AN INVESTIGATION ARE COMPLETE, ANY SEARCH WARRANTS ARE OBTAINED AND PROPERLY EXECUTED, PERTINENT EVIDENCE IS COLLECTED AND SECURED, STATEMENTS ARE TAKEN THAT WILL STAND UP UNDER THE CHARTER.

THE CONSERVATION OFFICER IS ALSO RESPONSIBLE FOR THE CO-ORDINATION OF EVIDENCE AND LIAISON WITH THE CROWN COUNSEL FOR THE NECESSARY CASE REPORTS. THE TECHNICAL STAFF IS REQUIRED TO GIVE TECHNICAL AND OPINION EVIDENCE (EXPERT).

UNDER THE RECENT AMENDMENTS TO THE WASTE MANAGEMENT ACT DEALING WITH SPECIAL WASTE, CONSERVATION OFFICERS AND POLICE OFFICERS WILL BE THE ONLY OFFICERS ALLOWED TO STOP, SEARCH AND SEIZE VEHICLES BELIEVED TO BE IN VIOLATION OF THE ACT OR REGULATION, EITHER BY WAY OF WARRANT OR WARRANTLESS IN EMERGENCIES, AS AUTHORIZED BY LEGISLATION.

OR STOPPING VEHICLES

NOTE: - WITH REGARDS TO ENTRY WITH OR WITHOUT WARRANTS, THERE APPEARS TO BE, IN THE MIND OF THE COURTS UP TO AND INCLUDING THE SUPREME COURT, A DIFFERENCE BETWEEN ENTERING A PLACE FOR THE PURPOSE OF ROUTINE MONITORING (WARRANTLESS ENTRY AUTHORIZED WITHIN THE STATUTE ITSELF) AND ENTRY ON REASONABLE AND PROBABLE GROUNDS OF OFFENCES (WARRANT REQUIRED, UNLESS EMERGENCY).

QUALITY CONTROL - CHECK AND BALANCES

THE DEPUTY MINISTER HAS SET UP A "PROSECUTION COMMITTEE" CONSISTING OF THE CHIEF CONSERVATION OFFICER, THE DIRECTOR OF THE WASTE MANAGEMENT BRANCH AND A LAWYER FOR THE MINISTRY OF ATTORNEY GENERAL.

THE PURPOSE OF THIS COMMITTEE IS TO REVIEW ALL RECOMMENDATIONS FOR PROSECUTION AGAINST COMPANIES IN AND MUNICIPALITIES OR OTHER GOVERNMENT AGENCIES VIOLATION OF THEIR PERMITS ~~AS WELL AS MUNICIPALITIES.~~ (VIOLATIONS NOT INVOLVING PERMITS ARE EXEMPT FROM THIS COMMITTEE).

LOSS AMOCE.

THE NEED FOR THE COMMITTEE STEMMED FROM A NUMBER OF PROSECUTIONS WHICH WERE LOST MAINLY THROUGH THE DEFENCE OF "DUE DILIGENCE" AND THE DEPUTY MINISTER DECIDED THAT AN OVERVIEW COMMITTEE WAS REQUIRED TO ENSURE

1. PROSECUTION WAS THE DESIRABLE COURSE OF ACTION,
2. THE INVESTIGATION WAS COMPLETE IN THAT ALL POSSIBLE DEFENCES WERE ANTICIPATED AND COUNTERED, AND
3. THERE WERE NO LEGAL IMPEDIMENTS TO PROSECUTION.

THIS COMMITTEE HAS MET WITH VARYING DEGREES OF ACCEPTANCE FROM THE FIELD IN THAT REGIONAL MANAGERS AND DIRECTORS FEEL THAT THEY SHOULD HAVE AUTHORITY TO PROCEED WITHOUT SEEKING PERMISSION FROM HEADQUARTERS. ON THE WHOLE, HOWEVER, I FEEL THAT IT IS DESIRABLE FOR THE REASONS STATED, TO HAVE SUCH AN "OVERSIGHT" COMMITTEE.

WHILE ON THIS SUBJECT, I WOULD LIKE TO MENTION THAT ONE OF THE MAJOR WEAKNESSES IN OUR ENFORCEMENT PROGRAM IS THE LACK OF EXPERIENCED PROSECUTORS. WE ARE OBLIGED TO USE THE LOCAL CROWN COUNSELS AND WE HAVE FOUND THAT THIS INEXPERIENCE IS COMPOUNDED BY:

1. LACK OF INTEREST IN ENVIRONMENTAL MATTERS,

2. LACK OF FAMILIARITY WITH THE TECHNICAL ASPECTS OF THE LEGISLATION AND

3. HIGH TURNOVER RATE - THE ATTORNEY'GENERAL'S MINISTRY ENCOURAGES THIS AS IT SEES ITSELF AS A TRAINING GROUND IN THE DEVELOPMENT STAGES FOR LAWYERS ULTIMATELY GOING INTO PRIVATE PRACTICE. THE EFFECT OF THIS POLICY IS THAT WE JUST TRAIN ONE CROWN COUNSEL TO BE KNOWLEDGEABLE IN AN AREA WHERE WE BEGIN TO HAVE SOME CONFIDENCE IN HIS ABILITY TO CARRY A CASE, WHEN HE LEAVES AND WE MUST START ALL OVER AGAIN.

IF I HAVE ONE DEFINITE RECOMMENDATION TO MAKE, IN THIS AREA BASED ON EIGHT YEARS EXPERIENCE, IT WOULD BE TO FOLLOW ONTARIO'S EXAMPLE AND SECOND COMPETENT PROSECUTORS TO YOUR MINISTRY WHOSE MAIN FUNCTION WOULD BE TO ACT AS SPECIAL PROSECUTORS FOR ENVIRONMENTAL LEGISLATION.

RECRUITMENT

ONTARIO HAS GONE THE POLICE OFFICER ROUTE. RECRUITING, I UNDERSTAND, EX-POLICE OFFICERS.

WE HAVE GONE ANOTHER ROUTE, RECRUITING, INSTEAD, GRADUATES OF COLLEGES OR UNIVERSITIES IN RESOURCE MANAGEMENT AND ENFORCEMENT (EXAMPLE LETHBRIDGE). WE GIVE IN-SERVICE TRAINING IN THE LAW AND ITS APPLICATION, AND ENFORCEMENT TECHNIQUES. WE HAVE MADE A CONSCIOUS DECISION THAT RESOURCE AND ENVIRONMENTAL ENFORCEMENT REQUIRES MORE

THAN JUST THE SKILLS THAT AN EX-POLICE OFFICER CAN BRING TO ENFORCEMENT (AND I MEAN NO INSULT BY THIS. I AM AN EX-POLICE OFFICER MYSELF) BUT MUST HAVE A "FEEL" FOR THE ENFORCEMENT HE IS DOING AND A BASIC KNOWLEDGE OF THE FIELD IN WHICH HE IS ENFORCING.

WE DID HOWEVER HAVE ONE ADVANTAGE OVER ONTARIO, IN THAT THEY HAD TO RECRUIT FROM SCRATCH. WE HAD AN EXISTING ENFORCEMENT GROUP

IF WE WERE TO FOLLOW ONTARIO'S EXAMPLE AND MAKE ENFORCEMENT, BY AND LARGE, COMPLETELY INDEPENDENT OF THE "ABATEMENT" ROLE AND I PERSONALLY FIND THIS ALTERNATIVE HAS ITS ADVANTAGES, I BELIEVE WE WOULD STILL RECRUIT FROM THE GRADUATES OF RESOURCE PROGRAMS OF THE COLLEGES AND UNIVERSITIES WHO ARE INTERESTED IN THE LAW AND ITS ENFORCEMENT AND PROVIDE IN-SERVICE TRAINING IN LAW ENFORCEMENT.

THE ONLY OTHER OPTION, HIRING EX-POLICE OFFICERS, AND PROVIDING TRAINING IN THE TECHNICALITIES OF RESOURCE MANAGEMENT WAS FELT TO BE SELF-DEFEATING FROM A COST BENEFIT POINT OF VIEW IN BOTH THE LONG AND SHORT TERM, MAINLY BECAUSE RESOURCE LAW ENFORCEMENT IS A COMPLETELY DIFFERENT KETTLE OF FISH FROM THE STRAIGHT FORWARD POLICE FUNCTION, AND ALSO WE WOULD CONTINUALLY HAVE TO RECRUIT THE ENFORCEMENT EXPERTISE RATHER THAN DEVELOP A CAREER ORIENTED SERVICE

RECOMMENDATIONS

MY RECOMMENDATIONS ARE AS FOLLOWS:

1. ENSURE THAT ALL LICENCES AND PERMITS AS WELL AS THE TERMS AND CONDITIONS ATTACHED TO THEM ARE AS AIR TIGHT AS POSSIBLE. ALL SUCH DOCUMENTATION SHOULD BE DEVELOPED UNDER THE ASSUMPTION THAT THEY WILL END UP IN COURT.

IN ADDITION, WHILE NEGOTIATIONS BETWEEN ABATEMENT PERSONNEL AND INDUSTRY ARE INEVITABLE, ALL SUCH NEGOTIATIONS SHOULD BE DOCUMENTED ON FILE AND INFORMAL NEGOTIATIONS AND INFORMAL AGREEMENTS DISCOURAGED.

NOTHING, REPEAT NOTHING, WILL SINK A PROSECUTION FASTER THAN POORLY CONSTRUCTED PERMITS AND/OR EVIDENCE OF INFORMAL AGREEMENTS WHICH SEEM TO FLY IN THE FACE OF THE EVIDENCE IN CHIEF.

2. RECRUITMENT

IF YOU RECRUIT TECHNICAL PEOPLE FOR ENFORCEMENT, ENSURE THEY ARE ENFORCEMENT ORIENTED AND ARE NOT INTIMIDATED BY THE LEGAL PROCESS, ESPECIALLY GIVING EVIDENCE IN COURT SOMETIMES UNDER DEFENCE ATTACK. ANY ENFORCEMENT EFFORT WILL FAIL IF IT IS STAFFED BY PEOPLE WHO REALLY DON'T WANT TO BE ENFORCEMENT OFFICERS.

IF, ON THE OTHER HAND, YOU RECRUIT EX-POLICE OFFICERS, FIND OUT WHY THEY ARE EX-POLICE OFFICERS. WHILE MOST POLICE FORCES, INCLUDING THE R.C.M.P. HAVE GOOD SCREENING PROCEDURES IN THEIR RECRUITMENT PROCESS, SOME PEOPLE JOIN FOR THE WRONG REASONS AND YOU REALLY DON'T WANT TO FALL HEIR TO SOME OTHER POLICE FORCE'S PROBLEM CHILDREN.

3. TRAINING

ONE OF THE MOST CRUCIAL AREAS OF ANY LAW ENFORCEMENT ORGANIZATION. IF YOU SELECT EX-POLICE OFFICERS, THEY MUST BE TRAINED IN THE AREA OF THE TECHNICAL EXPERTISE OF WASTE MANAGEMENT, POLLUTION, SPECIAL WASTES, ETC. IF YOU SELECT PERSONS WITH THE TECHNICAL EXPERTISE, IT IS ABSOLUTELY ESSENTIAL THEY RECEIVE IN-DEPTH LAW ENFORCEMENT TRAINING TO ENABLE THEM TO UNDERTAKE THE INVESTIGATIONS REQUIRED.

4. COMPETENT LEGAL SUPPORT

IN ANY COURT CASE, THE PROSECUTING ATTORNEY IS THE MOST CRUCIAL PERSON TO THE SUCCESS OF THE PROSECUTION. TO ENSURE COMPETENCY, THE LEGAL STAFF MUST BECOME INTIMATELY FAMILIAR WITH THE AREA OF ENVIRONMENTAL MANAGEMENT. YOU CAN BE SURE IF PROSECUTION OF A LARGE COMPANY IS INSTITUTED, THEY WILL HAVE ACCESS TO EXTREMELY COMPETENT AND HIGH-PRICED LEGAL ADVICE.

5. KNOWLEDGEABLE JUDGES

IT IS EXTREMELY FRUSTRATING TO PRESENT A COMPLICATED BUT SERIOUS CASE TO A MEMBER OF THE JUDICIARY, WHO EITHER DOES NOT UNDERSTAND THE TECHNICAL ISSUES INVOLVED OR DOESN'T CARE ABOUT THEM. IT MAY BE NECESSARY TO UNDERTAKE SOME KIND OF EDUCATIONAL PROGRAM WITH THE JUDICIARY IN ORDER TO SENSITIZE THEM TO THE SERIOUSNESS OF THE MATTERS AND THE TECHNICALITIES INVOLVED IN SUCH PROSECUTIONS.

WITH THE PERMISSION OF THE CHIEF JUDGE

6. SENIOR MINISTRY STAFF MUST BE SUPPORTING AND UNDERSTANDING OF THE BASIC NEEDS OF AN EFFECTIVE ENFORCEMENT UNIT TRAINING AND SUFFICIENT FUNDING.

7. IT IS ABSOLUTELY ESSENTIAL, IN MY VIEW, THAT A MANUAL OF POLICIES AND PROCEDURES BE DEVELOPED WHICH WILL EXPLAIN, EXPAND ON AND GIVE GUIDANCE IN THE INTERPRETATION OF THE PROVISIONS OF YOUR ACT AND HOW THEY ARE TO BE IMPLEMENTED. THIS IS ESPECIALLY IMPORTANT IN THE AREAS OF NEGOTIATIONS BOTH FORMAL AND INFORMAL AND AS TO WHEN PROSECUTION WILL BE UNDERTAKEN.

8. LAST BUT NOT LEAST, RECRUIT A PERSON TO HEAD UP THE LAW ENFORCEMENT UNIT WHO HAS HAD A GREAT DEAL OF EXPERIENCE AT ALL LEVELS, FROM THE FIELD LEVEL TO MANAGEMENT IN A RECOGNIZED LAW ENFORCEMENT AGENCY. HE MUST KNOW HIS WAY AROUND IN ALL AREAS OF THE INVESTIGATIVE/ ENFORCEMENT FIELD.

   ORGANIZATIONS WHICH HAVE HAD "PROFESSIONALS" AS DIRECTORS, I.E., BIOLOGISTS, ENGINEERS, ETC., HAVE, FOR THE MOST PART, ENDED UP WITH INEFFECTIVE ENFORCEMENT GROUPS.

   EXPERIENCED LEADERSHIP IN THE INVESTIGATIVE/ENFORCEMENT FIELD IS A NECESSITY.

I. INTRODUCTION

The Fish and Wildlife Division has, relative to many other Alberta Government agencies, a long history in the area of environmental legislation administration and its enforcement. The fact that the fisheries and wildlife resources and the ecological systems that support them are, for better or worse, partitioned from the other things in our environment by legislators and administrators based on tradition, this never-the-less does not change the fact that these resources and the ecological systems that maintain them constitute an integral part of our environment. I do not believe a fish recognizes when it transcends from federal to provincial jurisdiction. Nor do I suspect that same fish understands the implications to its day-to-day life processes when the quality of its aquatic environment crosses from the Fisheries Act to the Clean Water Act.

In general, the point I am trying to make is that, in my judgement, the long term objectives from an aquatic environmental protection perspective of Alberta Environment and the Fish and Wildlife Division, should be complementary, if not, the same in principle.

It is within this framework that I wish to tailor my presentation. The thoughts that follow are also tempered by five over-riding precepts:

(a) It is incumbent on our respective agencies to insure that we reflect the most cost effective and efficient strategic approach(es) consistent with the Government's commitment to restraint.

(b) We collectively view our public service and resource conservation responsibilities from a team perspective within which roles and responsibilities can be defined.

(c) We collectively strive to establish environmental standards that are mutually understood and supported.

(d) Where traditional practice or thinking at an organizational level impedes our commitment to these precepts, to positively and constructively pursue change whenever necessary.

(e) Where government legislation, policy and/or programs impede our commitment to these precepts, be prepared to positively and constructively recommend changes to our respective Ministers that will rectify the situation.

At the outset I also wish to emphasize that it is my intention and sincere hope the views that follow are received in a constructive and non-critical vane. I believe that Alberta Environment should be commended for having the foresight to examine their legislation, policies and programs for their betterment and I wish to express my appreciation for the invitation to contribute to your deliberations on the complex issues before you.

II. ENFORCEMENT PHILOSOPHY

At the outset I believe it is worthwhile to reflect on the basic philosophy of the Fish and Wildlife Division respecting the administration of legislation, in the broadest sense.

In general, we believe that the laws established by our Legislature or the House of Commons, must be enforced in a consistent, competent and impartial manner while at the same time being sensitive to the needs and expectations of the public we are serving.

This overview statement encompasses a wide range of subjects, some of which are:

(a) The affected parties should have the opportunity to contribute to the development of and understand the legislative program in question.

(b) The legislation must have general public understanding and support.

(c) Avoid introducing legislation where it is not required or if there is a reluctance to uphold it through enforcement.

(d) In areas where legislation is required, place as much effort as possible in educating the affected (and interested) parties on the rationale supporting the need for the legislation as well as how to avoid violating the legislation. For want of better terminology, I will use the phrase "preventative enforcement" to describe this important area.

I believe we should assume that if prosecution is warranted, that we collectively may have failed to educate those involved. Prosecution should be considered the last resort.

For example, from a resource perspective it does the illegally killed elk little good to prosecute the individual who killed it. Similarly, it also does dead or dying fish in a polluted river little good when we prosecute the polluter. Preventing the waste or loss of a resource through illegal activity should be paramount in any regulatory program. What I am talking about is pro-active versus reactive enforcement strategies.

(e) There comes a time when the enforcement (in a prosecution sense) of any legislation is absolutely essential.

Even in the situation where reasonable legislation has been developed and all effort has been made to educate those involved as to the needs and rationale for such legislation , there will invariably be an element of society who will ignore the law and commit violations.

An important consideration is the range of factors and circumstances that may contribute to a violation of the law and to what extent does an employee of the Crown have direction as to who will be prosecuted or when?

I believe the answer to this question is best reflected in the following Manitoba Court of Appeals decision dealing with senior civil servants attempting to influence the application of certain legislation to a specific race of people. Although the situation leading to the case decision was narrow in scope, the principle enunciated by one of Canada's more respected jurists merits consideration when viewing environmental law enforcement. I quote:

> "... nearly three centuries after the Bill of Rights, a certain departmental official in Manitoba, acting in fact or in law under the authority of his Minister, would purport to grant a dispensation in favor of a certain group exempting it from obedience to a particular law to which all others continue to remain subject. That sorry episode must now be recounted."

The Court further stated,

> "Today the dispensing power may be exercised in favor of Indians. Tomorrow it may be exercised in favor of Protestants, and the next day in favor of Jews. Our laws cannot be so treated. The Crown may not by executive action dispense with laws. The matter is as simple as that, and nearly three centuries of legal and constitutional history stand as the foundation for the principle." (R. vs. Catagas).

My point here is that once legislation has been established through a reasonable process that allows for input into its design by those directly affected and others, and effort is made by the Crown to educate society as to the rationale for this need of the legislation and, if necessary, even how the Crown would approach its enforcement, then this legislation should be administered by the Crown in a consistent, impartial and professional manner.

Within the preceding context I wish to provide the following comments. Due to the significant interface that exists in the legislative authority of our respective agencies as it pertains to the aquatic environment from a fisheries perspective, I will focus solely on this area in the following manner.

A. Importance and need for environmental law;
B. Fish and Wildlife Division's policy and legislative mandate;
C. Fish and Wildlife Division's perspective on its role in environmental law;
D. Mitigation;
E. Problems;
F. Recommendations.

A. The Importance and Need for Environmental Law

Without belittling the importance of this subject with brevity, I believe that man's (i.e. the animal) place in the biosphere and ecosystems as being interdependent with the other biotic and abiotic components in the environment is accepted but still in need of a more refined understanding. So the ultimate survival of our species is involved.

Water is fundamental to all life forms on earth, man in particular. Clean water is an important ingredient in a wide range of industrial processes. Clean water also comprises the major focus of a wide range of outdoor recreational activities not the least of which is recreational fishing. Commercial and subsistence fisheries also depend on the water resources for their continuance. Water forms an integral component of wildlife habitat; a resource that also supports a wide range of recreational, commercial and subsistence needs.

The economic significance of Alberta's fish and wildlife resources can be described in terms of recreational, commercial and domestic benefits. Direct benefits associated with recreational hunting and angling amounted to

867 million dollars during the 1983/84 fiscal year while commercial use generated 10.7 million dollars. In that same year, secondary benefits exceeded 1 billion dollars and sustained an estimated 33,730 full time jobs. Fish and Wildlife also provided over 8 million dollars in food and subsistence use. It is clear that the fish and wildlife resources that depend on the water resources of this Province, currently contribute significantly to Alberta's economy and, without a doubt, will contribute even moreso in the future.

If one discounts some of the small eastern Canadian provinces, Alberta has the smallest percentage of water surface when compared to land surface of any provincial jurisdiction in Canada. Only about 2.0% of Alberta is covered with water and much of this area is comprised of seasonal or semi-permanent shallow water bodies. When one further considers the seasonality of flows off of the East Slopes of Alberta, water must truly be viewed as a premium resource in Alberta - a resource that requires society's utmost commitment to conserve and protect for our present needs, the needs of other Canadians and, in particular, for future generations.

B. FISH AND WILDLIFE LEGISLATION AND POLICIES

1. Policies

(a) Fish and Wildlife Policy for Alberta (1982)
- represents a full Caucus and Cabinet endorsement;
- represents the only such comprehensive policy of its kind in Canada, and possibly North America;

(b) Status of Fish and Wildlife Resources in Alberta (1984)
- represents a follow through to the Fish and Wildlife Policy for Alberta (1982) and the "declaration" commitment on the resource found therein;
- represents a full Caucus and Cabinet endorsed policy;
- this is also a unique government commitment toward resource goals unequalled by any other Canadian jurisdiction;

- establishes public benefit goals, species population requirements (i.e. goals) to achieve the established level of public benefits, and the required habitat to sustain the species populations identified.

(c) A wide range of specific policy positions exist on fish and wildlife resources and their allocation.

2. Legislation (includes Regulations)

(a) Administered by the Fish and Wildlife Division

(i) Fisheries Act (Canada)
- prohibits the alteration of fish habitat and the deposit of deleterious substances into water frequented by fish;
- prohibits the obstruction of fish passage;
- requires screening for diversions in fish bearing waters;
- prohibits the killing of fish by means of rockets, explosive materials or explosive projectiles or shells;
- exceptions are made for some activities authorized by regulation;
- Fisheries Act is binding on the Crown in right of Canada, or a province and any agent;
- administered and enforced by the Division;
- charges may be laid by any citizen.

(ii) Migratory Birds Convention Act (Canada)
- prohibits deposit of oil, oil waste or other substances harmful to migratory birds in waters or areas frequented by migratory birds;
- exceptions provided for activities authorized by regulation or federal Minister of Environment;
- administered and enforced by Division - CWS also present in province;
- charges can be laid by any citizen.

(iii) Litter Act
- prohibits deposit of litter on, into or under water or ice;
- exceptions provided for activities authorized under Clean Water Act, pursuant to approval under Public Health Act or in accordance with regulations;
- administered by Alberta Environment;
- Fish and Wildlife Officers enforce;
- charges can be laid by any citizen.

(b) Other Legislation

(i) Public Lands Act
- prohibits disturbance of public land resulting in injury to bed or shore of waterbody;
- administered by Public Lands Division;
- Fish and Wildlife Officers have no authority;

(ii) Forest and Prairie Protection Act
- erosion control and reclamation.

(iii) Clean Water Act
- prohibits deposit of water contaminants which will result in water being rendered harmful to human health of life, fish, wildlife, livestock or plants;
- exceptions are made for activities authorized by regulations or permit;
- administered by Alberta Environment;
- Fish and Wildlife Officers have no direct involvement in enforcement;
- Attorney General must approve commencement of action.

(iv) Water Resources Act
- drainage;
- allocation;
- in-stream flow.

C. FISH AND WILDLIFE DIVISION'S ROLE IN ENVIRONMENTAL LAW AND ITS ENFORCEMENT

The role of the Fish and Wildlife Division with regard to environmental law must be viewed from the broad perspective of how we deal with environmental management.

1. Planning

Sound land use planning and water basin planning can be very effective in forecasting and avoiding possible problems. Good inter-agency communication is essential in this regard. The Department of Forestry, Lands and Wildlife presently has developed and is continuing to develop Integrated Resource Plans in many parts of Alberta. The Integrated Planning Process has proven very useful in predicting and avoiding environmental problems. Participation with Municipal Affairs and local government

planning around lakes and streams is also very effective in averting the need for enforcement of environmental laws. Our biological staff are major contributors in these planning efforts and most of these activities are carried out at the operational level of this Division.

With regard to Water Quality Standards and Water Allocation the Fish and Wildlife Division believes that the most effective standards must consider the natural drainage basin characteristics and the species to be protected. The cummulative effects of water quality standards and water allocation requirements must be considered. Specific recommendations with regard to the matter of water quality standards and water withdrawal standards will be addressed later.

My major point here is that land use and water planning need to be done in a complementary way.

2. Coordinating Mechanisms - Referral Process

The current referral system provides the mechanism and opportunity for the Alberta Fish and Wildlife Division to assure requirements of the Fisheries Act are accomodated in licencing conditions. The process is established to allow input but it is necessary to monitor these systems to assure consistent application of policy and related regulations.

On behalf of this Division, this responsibility is largely administered by the Habitat section.

3. Enforcement and Court Action

The Fish and Wildlife Division is charged with the responsibility to assess development proposals, monitor activity that may adversely affect wildlife and fish habitat; and to act promptly when violations occur. The combination of comprehensive planning, education and clear communication is often the wisest strategy to avoid the need for prosecution.

Because many of the problems which threaten fish and wildlife habitat can be avoided by foresight and good planning, the Fish and Wildlife Division expends considerable effort on "prevention" through educating.

It is important that the public understand, recognize and support the value and the need for protection of fish and wildlife habitat. This means working with industry, individuals and groups, and government agencies to ensure that when decisions are made, they are made with a clear understanding of the options that exist and those options that can be pursued with reduced negative effects on the fish and wildlife resource.

Prevention is not always possible. When it is not, or when advice and warnings go unheeded, enforcement and possible prosecution are inevitable.

Officers of the Fish and Wildlife Division by virtue of their appointments as Fishery Officers, Wildlife Officers and Special Constables, have the responsibility of investigating occurrences concerning environmental matters. Often action is triggered by public complaints in addition to those matters detected by other agencies of government or by the Division in its normal course of duty.

During the 1986/87 fiscal year a total of three hundred and eighty six (386) occurrences were recorded by district offices throughout the province that dealt with some aspect of environmental concern. It is interesting to note of these 386 occurrences, only one prosecution was undertaken with seven incidents resulting in warnings.

Prior to any "enforcement action" dealing with environmental matters, a procedure has been put in place with Alberta Environment and the Attorney General's Department in order to monitor and assess environmental investigations. This process is necessary in order to ensure that quality and consistent investigations are conducted, all pertinent samples have been collected as well as other necessary evidence, and inter-departmental coordination exists. The final step in the procedure is a review of the compiled evidence by senior prosecutors of the Attorney General who then determine if charges should be actioned.

The Fish and Wildlife Division has also entered into an agreement with the Alberta Environmental Centre which provides an analytical service of samples that are collected by Fish and Wildlife Division staff in preparation for enforcement action.

The capability of Fish and Wildlife Officers to administer enforcement

actions as they relate to environmental law has been developed and improved over the years. Our response capability in this regard has been improved most recently by the development of a 24 hour radio system including a toll free 1-800 number which allows for quick reporting by the public of possible violations, Officer response, investigation and, if required, prosecution.

Also, in order for divisional staff to become better informed and more qualified in environmental issues the Division has established an Environmental Law Training Course which is held on an annual basis. This course commenced in 1986 and to date two course sessions have been completed. Instructors are utilized from the private sector as well as from within government. The course outline covers:

1. General habitat and ecology
2. Water quality
3. Violations under the Fisheries Act
4. Collection of evidence
5. Legal aspects of fisheries violation investigations
6. Preparing a case and presentation of evidence
7. Case studies
8. Field simulations
9. Expert witness
10. Burden of proof and due diligence
11. Mock trial experience

The objectives of the course are to train staff in the collection of legal samples, preparing a case and finally to act as a witness in court.

From an academic qualification perspective, Alberta's Fish and Wildlife Officers are second to none in Canada. A college diploma in Renewable Resources with a resource law enforcement major is a basic requirement. The Division is currently considering a third year certificate in resource enforcement after completion of the two year college diploma. A total of 500 hours are devoted to law enforcement by the pertinent colleges. All aspects of criminal and provincial law are dealt with. New officer staff go through a minimum of three years of training and assessment in the field under direct supervision before they are considered for a district officer appointment. In view of this background, we are confident that our officer

staff are capable of competently dealing with environmental law enforcement concerns.

Biological staff are university graduates with at least a B.Sc. degree and many have post graduate degrees in their related field. Our in-service training lends further to their expertise in dealing with environmental issues. With court appearances by many of our biological staff, the Division has developed considerable experience as "expert witnesses". Based on our experience we have determined that many of our staff are excellent witnesses. It is very gratifying to hear from the Attorney General's legal team that our staff have been effective and useful contributors in legal proceedings particularly in the area of environmental prosecutions. I should emphasize, however, that the Division's lead on environmental prosecutions lies with the Fish and Wildlife Officer staff who have expertise in the preparation of evidence for prosecution. Our biological staff assume an important support role to our Officers.

In observing some of the proceedings of the Suncor trial and of other environmental court actions, I am sure that the professional approach and competency of our investigating officers, and the contributing biological expertise represents an excellent team approach. I would further suggest that the concern, emphasis and effort placed on environmental matters by the Attorney General's Department provide positive and timely leadership in this area.

D. MITIGATION

The Fish and Wildlife Division has developed programs that exist to mitigate various developments that may negatively impact upon fish and wildlife habitat. Although I will not belabour this important point, I believe we should always be guided by the goal of "no net loss" for fish and wildlife resource interests. There is also room for proponent involvement and, in some cases, responsibility in this area.

E. PROBLEMS

1. There is a void in Government policy in the area of watershed management and the conservation of natural wetlands.

2. Within this much needed policy framework, there does not exist meaningful water quality and withdrawal standards developed on a watershed/basin basis that can be effectively administered. It is interesting to note that we currently put more effort into coordinating our respective agencies after problems arise rather than at the front end of the matter where problems can be avoided.

3. Because we lack water quality standards and water allocation standards that have mutual support, I believe we place the private sector in an unreasonable position in terms of compliance with all legislation that bears on water quality and quantity.

4. The lack of a rationalized approach to water quality and in-stream flow standards between our respective Provincial agencies places Alberta in a highly vulnerable position and, if we cannot resolve this interface, will beg Federal intervention.

F. RECOMMENDATIONS

1. Alberta Environment take a lead role in the development of a Government policy dealing with water resource management and the conservation of natural wetlands.

2. A more formal interface be developed in Alberta to integrate land use planning and water planning.

3. Water quality standards and in-stream flow standards should be established on a river basin and sub-region basis with these standards recognizing both fisheries and other environmental interests.

   NOTE: These standards should recognize and strengthen the linkage between river basin planning and licencing of the deposition of waste substances into water.

4. A clear and concise "roles" accord be established between Department of the Attorney General, Alberta Environment and the Alberta Fish and Wildlife Division that incorporates requirement for periodic reviews.

5. The long term cummulative impact of individual deviations from standards be factored into law enforcement procedures prosecution actions.

6. A major inter-agency public educational program be developed that focuses on the need for water conservation, water quality and in-stream flow requirements. Water quality standards and in-stream flow requirements should be made public so as to inform all water users of the Government's expectations necessary to maintain and effectively manage Alberta's water resources for all interests.

CONCLUSION

I would conclude by emphasizing the fact that the Fish and Wildlife Division is compelled to be involved in monitoring and assuring enforcement of legislation that is designed to protect the fish and wildlife resource. Environmental law is considered an important ingredient for the protection and maintenance of fish and wildlife. We believe successful water management requires the cooperation and commitment of industry, the public and all levels of the government.

Within the framework of a much needed water resources policy, is the further requirement for practical and enforceable quality and withdrawal standards that integrate fisheries, general environmental and societal needs.

Thank you for allowing the Fish and Wildlife Division to participate in this review.

Comments to
the Review Panel on
Environmental Law Enforcement in Alberta
by
Dr. Steve E. Hrudey, P.Eng.
Professor of Environmental Engineering
University of Alberta

The review panel has been given a very ambitious terms of reference. There is a danger that dealing with all of the detailed issues provided therein may avoid the need to deal with some fundamental issues concerning the conduct of Alberta Environment. Despite having a detailed licensing procedure and comprehensive legislation available, there has been an apparent reluctance to pursue prosecutions. From my experience, many senior members of Alberta Environment do not appear to believe in their own standards. In one case, during the Suncor trial in Ft. McMurray, a senior member of Alberta Environment asked me: "why we were picking on Suncor?" Clearly, if the attitude to enforcement of environmental legislation among many members of Alberta Environment staff does not change, no amount of alteration in legislation or regulations will change the effectiveness of enforcement action.

With regard to specific issues, a few major ones will be addressed.

1. Start-up Clauses. Regardless of technical difficulties there has to be, by definition, maximum acceptable discharge limits, based upon preventing short-term adverse responses. Blanket exemption is not acceptable. Selection of such levels can only be justified on the basis of receptor tolerance for higher levels for short times as opposed to long-term or cumulative response criteria. Selection of such criteria will always carry uncertainty. Therefore, as with all health protection standards, there must be a reasonable factor of safety, typically 10 to 100 times. If startup procedures cannot meet standards derived in a rational manner, the first recourse must be to developing alternate procedures, not to relaxing the standards. The latter is easiest to do for someone who does not believe in the merits of the standard in the first place.

2. Burden of Proof. There is a common misconception that scientific matters are "black and white". This is absolutely untrue, particularly

in the environmental sciences. Those areas of science for which our knowledge is least ambiguous are those which allow direct application of carefully controlled experimental investigation (i.e. solid state physics). However, natural systems in environmental science are not amenable to closely controlled experimental investigation. Most conclusions must be based either upon observation (including monitoring) or translation of controlled laboratory experimental findings to field circumstances. In either case, substantial judgement (and therefore disagreement among experts) and uncertainty is involved in drawing final conclusions.

Given this background, proving "beyond a reasonable doubt" that environmental damage arose strictly from a specific industrial discharge is nearly impossible. For comparison, if scientists had to prove "beyond a reasonable doubt" that the ozone layer is being damaged by chloro-fluorocarbons before any action could be taken, none would be forthcoming until the problem was well beyond control. Similarly, environmental standards have to err "reasonably" on the side of caution. However, they should be developed by a consultative process involving industry, environmental interest groups and the research community.

Once set, legislation must require only proof that the standards have been exceeded. In a prosecution, the court should not have to deal with whether the standard itself is appropriate. If the standard is to be challenged, that should occur at the time it is developed or placed in a license, not when the standard has been exceeded and prosecution has commenced. In other words, if I want to take exception to the speed limit on my route to work, I should challenge it on its merits. I should not wait until I get a speeding ticket and then waste the court's time arguing the merits of the limit. If current legislation precludes such advance challenges, that should be changed.

3. Respect for Alberta Environment. Based upon my experience in consulting for Alberta industry, I have found that there is very little respect for Alberta Environment's regulatory role. This is in sharp contrast to the ERCB. In their case, industry does not necessarily like the ERCB regulations, but they respect them and their inspection policy. Because Alberta Environment will never have enough staff to enforce rules which nobody believes in, the key to compliance is to develop respect for the standards development process and subsequent enforcement action.

4. Fairness in Enforcement. Those who lose the most when a given company is allowed to flaunt environmental requirements are the competitors. If they have been good corporate citizens and observed the rules, they have incurred costs which place them at a competitive disadvantage with the "bad actor". Furthermore, adverse publicity about the polluting industry will usually spread to related industries because the public does not distinguish. For example, I have lost track of the number of times people have talked to me about the "Syncrude" Fisheries Act trials. These kind of inequities are best overcome by a strict and effective enforcement policy which will require all members of the regulated community to regulate themselves if they wish to avoid prosecution.

5. Nature of Enforcement Team. Those engaged in enforcement must be separate from those who deal routinely with the company and must maintain relationships for communication. Experience has shown that it is very difficult for the latter group to become enforcers when the need arises. As well, an enforcement team requires a dedicated group of specialists with well developed communication skills. Because of the complexity and inter-disciplinary nature of environmental problems no single expert can deal with all issues. Frequently, communication between experts and legal staff becomes a major bottleneck. Legal staff selected for this team must have substantial related courtroom experience. The success of this group will depend entirely on fundamental, practical matters rather than theoretical legal issues.

Submission to the Review

Panel on Environmental Law Enforcement

September 29, 1987

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by

Alastair R. Lucas, Professor or Law,
The University of Calgary,
Acting Executive Director,
Canadian Institute of Resources Law

1. Public Involvement

1.1 General

Public involvement in the enforcement of environmental legislation has significant value. First, the public credibility of legislated environmental standards and enforcement procedures is of primary importance. Opportunities for participation in the process show members of the public enforcement strengths, and make them sensitive to potential problems involved in enforcement. Second, members of the public, can be an important source of information for enforcement officers.

In my opinion, the following statement by Robert and Mary-Anne H. Franson and I in an 1982 ECA report, Environmental Standards, at p. 196, still largely true:

> For the most part, the enforcement process is not accessible to the public. Permits may be public documents, but they may be hard to find and the right to copy them is sometimes denied. Monitoring data may also be accessible, in the sense that permission may be given to access it in an appropriate case. But monitoring data from particular dischargers may not be readily available. After an investigation has been started officials will be very reluctant to discuss the matter with anyone because they fear they may prejudice the courts it is said to be "sub judice" and is thought to be beyond comment. It is therefore very difficult for an individual to get any information about either a particular case or about the enforcement process in general.

Lack of information about the enforcement process can easily cause a lack of faith in the process. It becomes easy to believe that the laws are not being enforced, that government and industry are conspiring to avoid enforcement of environmental standards. Unfortunately, it is hard for government to combat this tendency. There are obvious reasons why officials would be reluctant to talk about a pending investigation, for example. And monitoring data are hard to understand in the best of circumstances, and harder still to make available.

Possible responses include:

(1) "State of the Environment" reports that include enforcement overviews and updates.

(2) Opportunities for the public to review and comment on reports outlining enforcement options in relation to particular pollution problems as a first step in the enforcement process.

More generally public involvement can be enhanced by:

(1) Providing incentives for public reporting of offences, including advertising and possibly sharing in fines recovered as a result of successful prosecutions.

(2) Providing opportunities for direct public enforcement, such as encouragement of private prosecutions and statutory rights to sue for damages and injunctions in relation to actions that result in breaches of environmental legislation. This is elaborated in the next section.

1.2 Standing to Sue — An Environmental Bill of Rights

The concept of an Environmental Bill of Rights involves vesting rights to a clean and healthy environment in individual citizens. This may be done by means of a constitutionally entrenched instrument such as the Canadian Charter of Rights and Freedoms, or simply by an ordinary statute. However, the key concept is broadly defined environmental rights vested in individuals, which can then be enforced through legal action. Environmentally harmful actions by public or private persons or agencies will be declared invalid and unlawful to the extent that they are found to conflict with the protected environmental rights. An example is the Michigan Environmental Protection Act 1970 (Mich. Comp. Laws

Am. Sec. 691.1201) which permits any person or organizations to sue "for the protection of the air, water and other natural resources and the public trust therein from pollution, impairment or destruction." A Canadian example is the Quebec Environment Quality Act which provides:

> 19.1 Environmental rights.—Every person has a right to a healthy environment and to its protection, and to the protection of the living species inhabiting it, to the extent provided for by this act and the regulations, orders, approvals and authorizations issued under any section of this act.
>
> 19.2 Recourse.—A judge of the Superior Court may grant an injunction to prohibit any act or operation which interferes or might interfere with the exercise of a right conferred by section 19.1.
>
> 19.3 Natural person.—The application for an injuction contemplated in section 19.2 may be made by any natural person domiciled in Quebec frequenting a place or the immediate vicinity of a place in respect of which a contravention is alleged.
>
> Attorney General.—It may also be made by the Procureur general and by any municipality where the contravention is being or about to be committed.

It should be noted that the Quebec rights are narrower, in that they are limited to the extent of environmental protection provided by the Act. The Michigan Act is a broader and "purer" form of Environmental Bill of Rights.

The idea of an Environmental Bill of Rights has also been partially approved by the federal government in its Canadian Environmental Protection Act (C.E.P.A.) (Bill C-74, first reading June 26, 1987). Section 127(1) of the Bill empowers the Minister to sue for an injunction to restrain any action that may constitute or be directed toward the commission of an offence under the Act. Section 128(1) gives a civil cause of action to any person who suffers loss or damage as a result of conduct that is contrary to any provision of the Act. This array of civil action enforcement mechanisms is rounded out by a provision s.128(2) that permits "any person" who suffers or is about to suffer loss or damage as a result of conduct that is contrary to any provision of the Act, to sue for an injunction to restrain the activity.

This latter provision is only a partial Environmental Bill of Rights because the right of action is given not to "any person" or, as in the Quebec Bill, to any person frequenting a place where the contravention is alleged to have occurred, but only to any person who suffers loss or damage.

In my opinion the time has come to complement this federal provision with a similar provincial right to restrain environmentally damaging activity. This will require amendment of the main statutes, the Clean Air and Clean Water Acts, and possibly the Land Surface Conservation and Reclamation Act.

1.3 A Right to Petition the Minister

The Canadian Environmental Protection Act contains two public involvement provisions that permit members of the public to petition the Minister with respect to certain enforcement actions.

1.3.1 Application for investigation. Any 12 persons who are of the opinion that an environmental offence has been committed may petition the Minister for an investigation of the alleged offence (s.100). On receipt of the application the Minister is required to acknowledge receipt of the application, inform the person who is subject of the complaint, and investigate all matters that the Minister considers necessary to determine the facts relating to the alleged offence. The Minister must provide progress reports on the request of the applicant or the person under investigation. The investigation may be discontinued; but if so, the minister is required to prepare a written report outlining the information obtained and the reasons for discontinuance.

This process provides a formal means for members of the public to initiate enforcement actions. The 12 person requirement eliminates mere individual whims. The effect is to give interested members of the public a stake in enforcement. Openness and receptiveness of the enforcement process to public input is underlined. But the Minister's hands are not tied. This is a provision that should be given serious consideration in Alberta.

1.3.2 A second public right to petition in the CEPA permits any person to file in writing a request that a substance be added to the priority substances list (i.e., priority for assessment as to toxicity and consequent regulation) under the Act. The analogue in Alberta would be a public right to request that a standard be established or that the current standard for a particular substance be reviewed. This is consistent with recommendations for public involvement in the setting of environmental standards by Franson, Franson and Lucas, in Environmental Standards, supra, at pp. 99-102.

2. Enforceability of Permit or Licences

I have not updated the work that was done on this subject for Environmental Standards, supra. This section is attached as Appendix A. However, it must be underlined that care should be taken to ensure precision in the drafting of permit or licence terms or conditions. One important safegurd is to have government legal staff routinely review these terms and conditions prior to permit issue.

3. Enforcement Agreements

3.1 Federal-Provincial Agreements

Provinces may assume enforcement responsibilities in relation to federal environmental legislation under federal-provincial agreements or accords. These documents may detail the enforcement roles of federal and provincial agencies under their respective legislative powers in relation to particular classes of activity.

These enforcement agreements are a dimension that must be considered in a provincial enforcement policy. One major problem with these agreements is the potential for inconsistent enforcement approaches under provincial policy and under federal-provincial agreements. Another factor is lack of enforceability if "agreements" are merely informal unwritten understandings. Such agreements also inhibit openness, since they are often not made public because they are considered to be sensitive federal-provincial arrangements. There is normally no

opportunity for public involvement or even public information during the negotiation and formulation of such agreements.

With these problems in mind the Canadian Environmental Advisory Council in its Review Of The Draft Federal Environmental Protection Act, March, 1987, at p. 36 made the following recommendations:

1) In order for the agreements to be legally binding on all concerned parties, they must be formal written agreements in which obligations are precisely set out, and not simply informal "understandings".

2) Some mechanism for public participation should be provided during negotiation of the agreements.

3) An audit procedure should be developed in order to ensure that the parties to the agreement adhere to their obligations.

4) The agreements should be made public documents, in order to ensure access to them by the public.

These recommendations should also be taken into account from the Alberta perspective.

3.2 Compliance Agreements

Neither the Clean Air Act, nor the Clean Water Act includes specific legal authority for the Department to enter into compliance agreements with polluters. The Minister has a wide power under s.7(g) of the Department of the Environment Act to enter into agreements with any person "for the prevention of the pollution, deterioration or impairment of the environment". However, this latter power is in the context of research or promotional agreements and does not appear to authorize specific compliance agreements.

If compliance agreements are to be used as an enforcement technique, clear legal authority must be added to the Clean Air and Clean Water Acts. This authority should include specification of criteria for agreements. There should also be an opportunity for public input when main elements of agreements have been determined, but prior to formal agreement. Without these safeguards compliance agreements may be used informally in a manner that not only makes them unenforceable, but that can become an obstacle to more formal, and more coercive measures such as control orders under the Clean Air and Clean Water Acts.

4. Absolute Liability Offences and the Charter of Rights and Freedoms

It may be appropriate to enhance enforceability as well as underline the gravity of certain offences by removing the due diligence and recasting them as absolute liability offences. While this approach carries some constitutional risk, there are indications in Reference Re Section 94(2) of the B.C. Motor Vehicle Act, [1986] 1 W.W.R. 481 (S.C.C.), that environmental offences may be validly structured as absolute liability provisions. The Supreme Court of Canada suggested that absolute liability offences do not per se offence section 7 of the Charter of Rights, and agreed that while absolute liability "public welfare offences" such as air and water pollution offences, may offence section 7, they may nevertheless be justified under Section 1 as, for example, necessary to protect against serious environmental harm. A great deal will turn on the combination of the particular absolute liability offence and any imprisonment prescribed.

APPENDIX A

Non-enforceability of orders and of conditions in permits and licences has clearly been a problem in some cases. One case was described above where the conditions were expressed in terms different from those required by the monitoring program. Other difficulties arise when the conditions are vague or ambiguous. This has been discussed in relation to monitoring. The British Columbia Fraser River Task Force found that "many of the Pollution Control Permits [that they studied] were written in vague or ambiguous terms and lacking in specific information" (7). They noted that this often made enforcement difficult.

The Task Force was particularly critical of the use of the phrase "at the Direction of the Regional Manager". It felt that more specific directions should be included in the permit. As the report pointed out, the discharger is free to operate as it will until it receives such directions. It is too easy in such a case for the pressures of time to intervene, and all too often directions may never be given. A similar comment may be made about the phrase "approved in writing by the Director" that appeared without accompanying time limits in several clauses of a Saskatchewan permit. We also encountered examples of vague terms or conditions in British Columbia permits. It may be useful to consider some examples briefly:

> Pilot testing of chemical and biological and other secondary treatment alternatives ... is to be undertaken to determine the most cost-effective alternatives for the plant.

One may easily think of a host of questions about this clause. How many alternatives are to be tested? How much testing is to take place? What is meant by cost-effective? Obviously a court would have great difficulty in enforcing this provision. Consider a second example:

> Should objectionable amounts of foam ... [result], additional treatment to reduce foam producing agents ... will be required.

What would constitute an objectionable amount of foam? What additional treatment would be required? Conditions of this kind were encountered in many of the permits we examined. However, it should be noted that they may have been more frequent in the older permits. Certainly government personnel were aware of the problem and asserted that greater care is now being taken. It should also be remembered that experience in this field really only dates from the early 1970s; some of the vague conditions undoubtedly resulted from inexperience.

In addition, there may be good reasons for including conditions that are not enforceable. For example, there may be some value to stating in the permit that additional treatment may be required if colour or foaming become objectionable. It is true that such a condition is unenforceable, but it does put the operator on notice of government concerns. If, in the future, government officials seek to amend the permit to deal with these concerns at least the operator cannot say that it comes as a surprise. Thus an Ontario Certificate of Approval contained a condition that "if at some future date a standard for vinyl chloride that is more stringent than the present [not directly enforceable] guideline is enacted, the applicant will take the necessary steps to comply with that standard". Strictly speaking the condition is unnecessary because such a standard when added to Regulation 15 would be directly enforceable. However, the condition serves a valuable notice function and removes the basis for complaints about preemptory rule changes.

IPAC

INDEPENDENT PETROLEUM ASSOCIATION OF CANADA
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October 8, 1987

FILE: 32-0001-01

Mr. K. Smith
Chairman Panel on Environmental Enforcement
Alberta Environment
9820 - 106 Street
Edmonton, Alberta
T5K 2J6

Dear Mr. Smith:

The Independent Petroleum Association of Canada is pleased to assist your Panel on Environmental Enforcement by making a presentation on October 13, 1987 and by providing resource people to assist the Task Force put together to assist the Panel.

Should you have further questions or wish our Association's input on consultation, please contact Mr. Hugh McIntosh at 290-1530.

Yours truly,

J. S. Poyen
Acting Executive Director

GAW/cj

cc J. Dilay, ERCB

CANADIAN PETROLEUM ASSOCIATION
3800, 150 Sixth Avenue S.W., Calgary, Alberta T2P 3Y7 Telephone (403) 269-6721

October 8, 1987

Mr. K. Smith
Chairman, Panel on Environmental
Enforcement
Alberta Environment
9820 - 106 Street
EDMONTON, Alberta
T5K 2J6

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Yours sincerely,

Ian R. Smyth,
President.

cc: Mr. J. Dilay, ERCB

Presentation to the

ALBERTA ENVIRONMENT

PANEL ON ENVIRONMENTAL ENFORCEMENT

by the

CANADIAN PETROLEUM ASSOCIATION

and

INDEPENDENT PETROLEUM ASSOCIATION OF CANADA

October 13, 1987

The Canadian Petroleum Association (CPA) and the Independent Petroleum Association of Canada (IPAC) are pleased to have the opportunity to address the Alberta Environment Panel on Environmental Enforcement. Resource people from our Associations were provided to assist the Task Force to the Panel.

Philosophically the subject of enforcement cannot be discussed without clearly understanding the level of compliance or the circumstances relating to non-compliance. We believe that the upstream petroleum industry has a good record of compliance with Alberta Environment permits and licences. We hope that the input from our resource people and the material contained in this presentation will result in improvements to an already good regulatory system.

- CPA/IPAC are satisfied that the existing compliance/enforcement procedures (as described in Figure 1) are very effective in identifying, discussing and resolving problems in a timely fashion.

- CPA/IPAC support vigorous prosecution of operators in cases of flagrant repeated non-compliance which result in environmental damage or life threatening situations. Infrequent nuisance releases should be handled through the existing compliance/enforcement procedure.

- CPA/IPAC encourage Alberta Environment to better publicize its good compliance record (see figure 2) and the fact that operating licence limits are not at levels which damage to the environment or public health and safety occur.

- CPA/IPAC encourage Alberta Environment to better publicize the extensive ambient and source monitoring and reporting that Industry are required to conduct by conditions in their operating licences.*

- CPA/IPAC suggests that if waiver clauses must be included in operating licences that we support inclusion of upset reporting and maximum levels to be emitted in the licence*.

- CPA/IPAC endorses separating environmental requirements such as emission limits (e.g. tonnes of sulphur per day) and ambient ground level concentration monitoring from plant performance criteria monitoring (e.g. stack top temperature, SO_2 concentration in incinerator stack) in the operating licence. The ~~environmental requirements would be higher~~ priority in compliance/enforcement review than the plant performance criteria. Targets for plant performance criteria might be established to help determine when an operation is having problems*.

- CPA/IPAC support a commissioning period and specific commissioning licence limits for commissioning new plants and plants that have had major modifications. These licence conditions should be established by an Industry - Alberta Environment - ERCB consultative committee.*

- CPA/IPAC support the concept that monitoring violations may be disclaimed by a specific facility if the facts show that the facility was not responsible (e.g. H_2S violations picked up at an ambient monitoring station when the plant is shut down or prevailing winds are blowing away from plant)*.

- CPA/IPAC support the initiative of an on-going consultative committee that could be convened to discuss compliance enforcement problems that are identified on an as-required basis. Examples of items that the consultative committee might discuss include review of normal start up - shut down licence conditions and the items identified in preceding points that have (*) as an identifier.

The entire matter of compliance and enforcement are subjective in nature, and the upstream petroleum industry is cognizant of the need to inform the public of its good record and the importance of prompt response when problems occur.

To promote a consistantly high level of performance, our associations are developing an Environmental Code of Practice. It is our plan to introduce the Code of Practice during 1988.

October 1987

ENFORCEMENT HIERARCHY

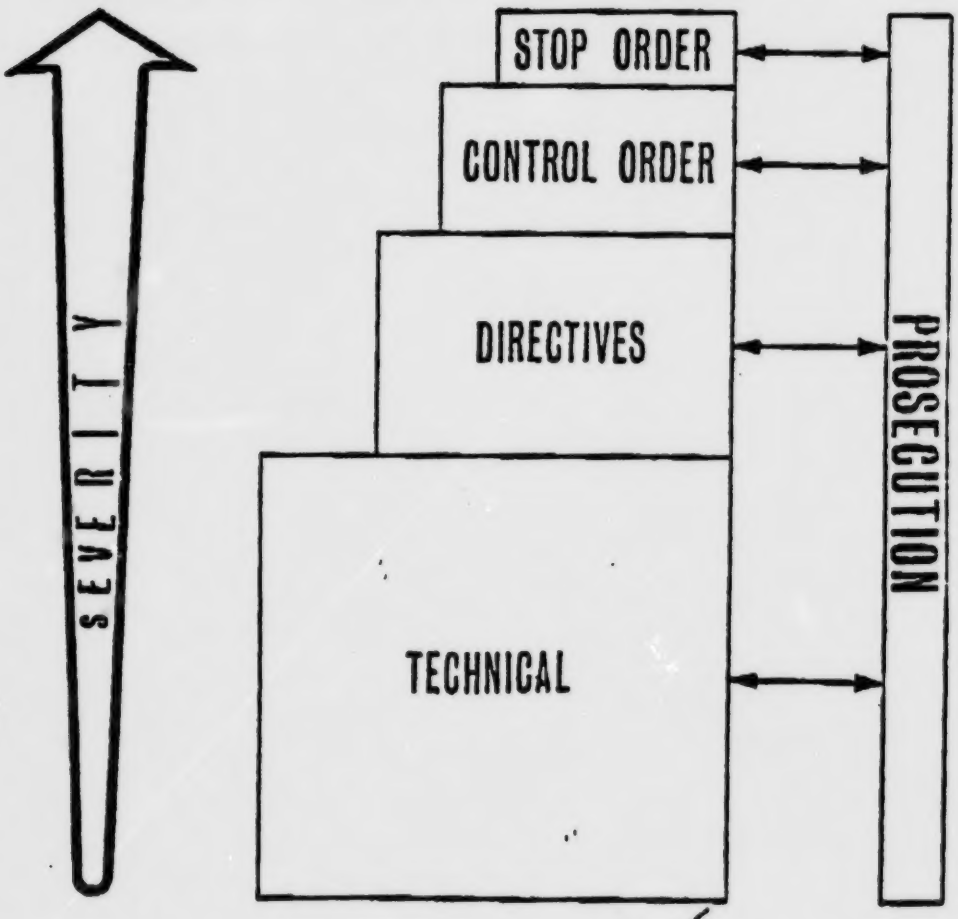

FIGURE 2

PRESENT COMPLIANCE PROCESS

- 98% of industrial operations in compliance (ongoing).
- 2,200 air licenses and 800 water licenses.
- 600 monthly reports on air, water and waste go to Department.
- This process is not used in Ontario.

Source: Alberta Environment

The Canadian Chemical Producers' Association

Alberta Regional Committee

SUBMISSION TO REVIEW PANEL ON ENVIRONMENTAL LAW ENFORCEMENT

BY THE CANADIAN CHEMICAL PRODUCERS' ASSOCIATION - ALBERTA REGION

The CCPA is pleased to have this opportunity of making a submission to the Enforcement Review Panel on matters relating to the protection of the environment and to regulation enforcement.

With the very tight time schedule for the Review Panel to present an action plan to the Minister, together with the complexity and depth of the subject, we have limited our brief to presenting general concepts and principles.

The Canadian Chemical Producers' Association was founded in 1962 and has a membership of over 70 companies on a national basis producing a broad range of petrochemicals, inorganic chemicals and other organic and specialty chemicals. The total output of these industrial chemicals and synthetic resins amounted to $7.8 billion in 1986 with direct employment of over 23,500 people. In Alberta, we currently have 11 plants of member companies, primarily in the petrochemical field.

We wish to present the following comments and viewpoints:

The CCPA has participated directly in the Task Force on Enforcement concerns associated with the startup, shutdown and non-normal operations - "The Enforcement Task Force".

The CCPA supports the recommendations of this Task Force.

Some CCPA member companies are also member participants in the Fort Saskatchewan Regional Industrial Association or the Strathcona Industrial Association. The CCPA supports in general the content of the briefs submitted to The Enforcement Review Panel by these organizations. In the interest of minimizing repetition and overlap in briefs, this brief will not deal in detail with common content.

Instead, we specifically wish to highlight and emphasize the position of the CCPA with respect to:

. Responsible Care and Environment

- The Criminal Code and Environmental Offences

- The effectiveness of adopting a multipartite consensus approach to assist in the detailed definition of improvements required to the present environmental regulatory and enforcement systems.

RESPONSIBLE CARE AND THE ENVIRONMENT

A summary of CCPA's position.

The formal committment by each member of the organization to the principles of responsible care is a prerequisite to membership.

The objectives of the programs are:

- Reduction of the public perception of involuntary risk.

- Maintenance of opportunities for self-initiated actions in preference to excessive regulation in the management of products and processes.

The theme "Responsible Care: A Total Committment" implies committment to the total life cycle of our products - from creation to destruction. It implies committment of our full membership without exception and broad committment by our employees, customers, governments and even the general public.

The Statement of Policy reads - The Canadian Chemical Industry is committed to taking every practical precaution towards ensuring that products do not present an unacceptable level of risk to employees, customers, the public or the environment. These principals have to be formally accepted. Endorsement is a condition of membership in the CCPA.

Industry recognizes that a degree of government regulation in combination with self-initiated actions of industry is required to ensure a sufficiently comprehensive, timely and orderly advance towards the goal of protecting the health and well being of Canadians and their environment and supports the development of equitable and attainable standards.

We believe that the best way to achieve this is to:

- Ensure that guidelines and regulations established by government are based on scientifically supported data or expert opinion.

- Ensure that guidelines and regulations are realistic in terms of societal cost/benefit considerations.

- Ensure that the confidentiality of information, as it might apply to competitiveness, is maintained.

The Canadian Chemical Producers are committed to develop and implement plans, programs and communications within industry and in conjunction with Governments, Regulatory Agencies and other resource groups and affected parties to promote "Responsible Care".

Some of the Guiding Principles are to:

- Ensure operations do not present an unacceptable level of risk to employees, customers, the public or the environment.
- Provide relevant information on the hazards of chemicals to its customers, urging them to use and dispose of products in an environmentally safe manner and to make such information available to the public on request.
- Make "Responsible Care" an early and integral part of the planning process leading to new products, processes or plants.
- Comply with all legal requirements (both in the letter and the intent) which affect its operations and products.
- Be responsive and sensitive to legitimate community concerns.
- Work actively with and assist governments and selected organizations to foster and encourage equitable and attainable standards.

With respect to the Development of Public Policy it is the conviction of the CCPA that regulation should be the result of a consultative process which recognizes the views of all affected stakeholders.

To this end, the association has participated in a variety of consultation efforts in conjunction with government and others. We strongly support the continuation of this process at all levels of government and will continue to promote these views.

Industry will also work with government to develop voluntary actions which will accomplish the desired objective without regulation.

The Responsible Management of Chemicals involves a series of Codes of Practice to be developed by specialized task forces comprised of representatives of member companies who are experts in the area governed by the code.

Code packages are being developed in the following areas in the sequence indicated.

- Community awareness and Emergency Response - including a Policy on Community Right to Know.
- Transportation.
- Disposal.

. Product Development.

. Distribution and Use.

. Manufacturing - including the Safety Assessment Process.

. Generation and Transmittal of Hazard Information.

Community Awareness and Emergency Response is a natural extension of the external programs component of the CCPA "Safety Assessment" activity.

It combines a fundamental and basic Grass Roots Community Outreach Program and a process for the development of a Community Wide Emergency Response Program. This program has become well entrenched in the Chemical Industry and surrounding communities over the past two years.

The Community Right to Know recognizes the need and right of the public to know the risks associated with the operations and products present in or transported through communities.

The CCPA's position with respect to the Criminal Code and Environmental Offences, which was developed in response to work being done by the Federal Law Reform Commission, may be stated as:

> The CCPA supports, in principle, a new prohibition in the Criminal Code explicitly and exclusively prohibiting crimes against the environment that involve risk to human health and safety. The prohibition should be based on conduct that amounts to flagrant and dramatic breach of a statue or standard.
>
> This proposed new offence should be used solely as a last resort for the most outrageous, intentional and serious environmental offences; the mental element test should be the same as that required for other criminal code offices and prosecutions should only be taken with the consent of the Attorney General.

SUMMARY OF VIEWPOINTS AND SUGGESTIONS FOR CONSIDERATION

The principal objective for both industry and the government should be the protection of the environment.

1. The CCPA has a very strong preference that the fundamental changes which appear to be part of the Review Panel's Mandate be addressed in a forum where all stakeholders could work to consensus on these very complex issues.

   The effective work recently done by the Hazardous Chemicals Advisory Committee at the Provincial level, the new Federal Environmental Legislation and the Federal/Provincial WHMIS System is eloquent evidence of the effectiveness of the consultative approach.

We urge the panel to promote the adoption of this kind of approach in its recommendations to the Minister as a crucial component of the Action Plan to define in detail the improvements required to the present environmental regulatory and enforcement systems. The CCPA is committed to providing resources required to participate in this activity.

2. The present system of enforcement, used by Alberta Environment results in a very high degree of compliance, should be retained with its corrective and preventative focus, in combination with a consultative approach, being used to obtain compliance.

   Only in those areas where ultimate sanctions are required should prosecution be used as a enforcement option:-

   . Where there is evidence of willful disregard of license conditions or regulatory requirements.

   or

   . Negligence by the licensee which acutely affects health or the safety of the public or results in demonstrable impairment of the environment.

   The CCPA's position on the Criminal Code on Environmental Offences summarizes our position.

3. The major components of the CCPA's Responsible Care Policy could well be built into the requirements of the permits to construct and licenses to operate used in Alberta. This approach will require the accountability of the operator.

W.G.G. Lindley
October 13, 1987
Doc. #M-448

CCPA MEMBER COMPANIES - ALBERTA REGION

CELANESE CANADA INC.

DOW CHEMICAL CANADA INC.

B.F. GOODRICH CANADA INC.

UNION CARBIDE CANADA LTD.

ESSO CHEMICALS CANADA

BORDEN CHEMICAL CANADA

ALBERTA GAS ETHYLENE CO. LTD.

SHELL CANADA CHEMICAL CO.

ALBERTA GAS CHEMICALS

C.I.L. INC.

W.G.G. Lindley
October 13, 1987
Doc. #M-448

POLLUTION CONTROL ENFORCEMENT IN ALBERTA

SUNCOR'S POSITION

September 1987

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1.0 Executive Summary

Alberta Environment is currently reviewing its enforcement approach to pollution control. Suncor Inc., being a major stake-holder in the development of petroleum resources in Alberta, is committed to environmental protection and, therefore, is contributing to this review by outlining our philosophy of environmental enforcement and current deficiencies.

The problems as perceived by Suncor Oil Sands Group are as follows:

- o Lack of understanding of regulated operations due to complexities.
- o Regulatory standards not realistic resulting in unenforceable licenses.
- o Overlap with other regulatory agencies.
- o Quality communication systems lacking with public and operators.

The priniciples to enforcement approach as we believe it should be are as follows:

- o Licenses must be written specific to the site and operation based on realistic standards. This is the most critical principle where environmental and human protection should be guaranteed. Abnormal operating events require different limits with contingency plans.
- o Due diligence principle is essential but diligence must be assessable objectively.
- o Consultative enforcement as currently in place be practiced.
- o Single window regulation is stressed.
- o Public must understand compliance data and environmental impacts.

We have concluded that Alberta Environment has the necessary legislation and enforcement framework but some improvements are required. To overcome the deficiencies as we observe them, we recommend the following:

- o Alberta Environment review organizational structure and staff requirements of relevant divisions for more effective regulation.
- o Continue current "consultative" approach and develop a system for objective assessment of diligence.
- o Resolve jurisdictional conflicts with other agencies.
- o Upgrade public understanding of environmental compliance technicalities.
- o Eliminate environmental standards from regulations to facilitate writing of realistic licenses.

2.0 Introduction

2.1 Suncor Background

Suncor is an integrated petroleum company with three major groups based in Canada. The Sunoco Group, based in Ontario, refines and distributes petroleum products. The Resources Group, based in Calgary, is involved with exploring, developing, producing and transporting petroleum resources and marketing natural gas. The Oil Sands Group mines, extracts and upgrades oil sands to produce synthetic crude oil at its lease in north-eastern Alberta.

Suncor has an environmental policy which reads "Suncor, as a responsible member of the many communities it serves and in which it operates, will not only comply with all air and water pollution laws and regulations, but also will adopt every reasonable measure for the protection and conservation of air and water resources in the acquisition, processing, and distributing of all of its products".

Suncor Oil Sands Group, specific to this paper, is committed to this policy and has demonstrated a high standard of compliance performance. Over the past five years we have spent over $70 million on projects to improve environmental control. We have excelled in environmental programs such as land reclamation and waste management. We also conduct impact monitoring programs and studies to ensure our activities are not causing environmental problems. Effects on the local environment have been found to be insignificant.

2.2 The Current Situation as Perceived by Suncor

Alberta has been lauded internationally as having some of the toughest environmental legislation in the world. Alberta Environment's approach to pollution control enforcement has also been commended and Suncor endorses this approach as fundamentally correct. However, recently Alberta Environment has come under public and political scrutiny for an assortment of reasons. The department has responded by initiating a review of their enforcement approach by a select panel of experts.

We support legislation that aims at the preservation of environment which facilitates resource development. Suncor is committed to environmental protection and being a major holder of operating environmental licenses in Alberta, we believe that our contribution to this review must be considered. Therefore, it is our intent to outline deficiencies in current enforcement practices and present our philosophy of environmental enforcement.

2.2 Scope of this Paper

This paper will address legislation relevant to Alberta Environment's authority with the primary emphasis upon enforcement of the Clean Air and Water Acts. These are the main problem areas with respect to enforcement which are related to the control of pollutant discharges to environment.

Our concerns will be expressed by defining specific problems of environmental law enforcement which have become obvious to us and suggesting solutions which have been formulated on the basis of some fundamental principles of enforcement discussed herein.

This paper is specific in its reference to experiences and observations within our oil sands operation. However, we believe that enforcement problem areas we have encountered are common to other operations and enforcement principles upon which solutions should be based are generally applicable province-wide.

3.0 Enforcement Problem Areas

3.1 Complexity of Regulated Operations

Oil sands processing plants at Suncor encompass mining, extraction, and upgrading operations to produce synthetic crude oil. The operation of these plants is highly interdependent and supported by a utilities plant producing and distributing power, steam, compressed air and water. The adversity of the local climate is another complicating factor to oil sands operations.

During upset or unsteady-state operating conditions, the interdependence of various processes can cause what we describe as a "domino" effect. The sulphur plant operation at Suncor is somewhat unique in this respect and differs from sour gas plants which have a steadier acid gas flow and very few upstream disturbances. Generally, the net result of the increased frequency of upstream disturbance is a higher level of short term emissions from the sulphur plant stack. Sometimes, due to these upsets sour gas streams are flared to prevent or minimize events which could downgrade the emission control system.

Furthermore, process control systems are generally designed to conform with safety regulations and to protect the integrity of process units. Consequently, a sulphur plant incinerator may trip to ensure such safety integrity resulting in a lowered temperature at the stack tip.

In summary, it is important to appreciate field operating conditions to effectively enforce environmental regulations. In reality, short term limit exceedences will occur and regulators must be knowledgeable to be able to assess each situation.

3.2 Difficulties in Enforcing the Standards

Standards should be realistic, achievable and be able to adequately protect the environment without causing unwarranted economic impact on industry. Once the appropriate standards are established, processing plant discharge limits can be set and control strategies formulated.

One of the difficulties Alberta industry is presently facing is the unrealistically strict and arbitrary nature of ambient SO_2 and H_2S standards. The 0.17 ppm 1 hour average ambient standard is a desirable long term air quality objective. Research has shown that this level of ambient SO_2 has no environmental impact. Even though, Alberta industry has been achieving approximately 99% compliance with this standard, the public's concern is with the 1%, not understanding the insignificance of these so-called contraventions.

The extremely low level of ambient H_2S (10 ppb over one hour average) has been suggested as the appropriate standard due to odor concerns. We question the technical validity of the odor threshold data-base in setting this standard. For instance, odor would not be a concern in an uninhabited area.

With reference to water quality, we request that provincial and federal officials work together to develop realistic guidelines applicable to the discharge of waters from our oil sands operations. Unrealistic standards which may be applicable by virtue of the Fisheries Act (Federal) must be replaced by standards consistent with the Clean Water Act (Alberta) as they have been for refineries in Canada.

The ability of the local environment to absorb pollutants is difficult to study. Variability within and between ecosystems is well known. Therefore, to apply environmental air and water quality standards consistently throughout the province for enforcement purposes is impractical and unfair. Thus standards should be considered as a guideline for plant design and indicators of air and water quality and regulated operators should be encouraged to target for these. The guideline targets should be established using the best available scientific knowledge in the area or an extrapolation from other similar areas.

In summary, inflexible and unrealistic environmental standards instituted into regulations is not a workable solution to enforcement. Treating standards as guidelines will produce enforceable licenses and higher comfort level with the public.

3.3 Who is the Enforcer?

The roles and responsibilities of each party to environmental regulation must be clarified for the public, special-interest groups, Alberta Environment, and other agencies.

Alberta Environment, the E.R.C.B. and their respective areas of legislative authority are prime examples of overlapping regulation. For example, at Suncor's oil sands operation, the performance of stack monitoring equipment is of interest to both the E.R.C.B. and Alberta Environment, with respect to sulphur balances and emissions, respectively. Yet it is clearly spelled out in the Air Monitoring Directive that Alberta Environment is accountable for stack monitor performance concerns. This situation has caused confusion and unproductive efforts on the part of the company and the two agencies.

Another example includes the inconsistency in the definition of spills, licensed discharges, and discharge of deleterious substances. In this case the E.R.C.B., Alberta Environment and Alberta Fish and Wildlife all have an interest.

With respect to the public, it must be made clear by government that Alberta Environment is the enforcer. Alberta Environment has a responsibility to respond to the public's concern, but it also has the responsibility of ensuring the concern is legitimate. An odor issue in Fort McMurray is a case example where an unclear definition of a problem has caused the public's concern not to be answered and prevented local industry from addressing the problem properly.

3.4 Communications

Pollution control systems, compliance performance information, and environmental impact studies are all technical and complex subjects. The general public does not have the background nor the understanding of the issues surrounding these to put them in the proper perspective. This inevitably and historically has lead to undue pressure on regulators to respond in a manner inappropriate to the situation. By their very nature the public focus upon the negative and are disinterested in the positive.

The relationship between industry and Alberta Environment is generally healthy. However, two problem areas contribute to ineffective regulation: (i) trivial requests for information, and (ii) late response to compliance issues. These problems are likely symptomatic of Alberta Environment organizational and staff deficiencies.

4.0 Principles for Enforcement Approach

4.1 Site Specific and Operation Specific License

Establishing operating limits for discharges of effluents and emissions is the most critical aspect of enforcement effectiveness. Best practicable technology combined with site specific requirements for operating licenses is the preferred approach which will yield the maximum benefit to the public and environment. Even within the province of Alberta there is a diversity of factors such as local environments, proximities to and density of populations, and processes with varying degrees of hazardousness. It is recognized that environmental laws and standards must change as new technologies develop. However, regulators must be cognizant of complications associated in retrofitting of pollution control equipment to current operations. Lastly, special operating conditions such as start-ups, shut-downs, and upset events are inherent in any processing operation. This must be recognized.

Air emission and effluent discharge control strategy must take into account long-term environmental effects and short-term pollution episodes. Many control options can be considered but each will be dependent on the specific site and the specific operation.

As previously discussed environmental standards should be used as guidelines for plant design and for an indicator of environmental quality. With the vagaries of weather and other environmental variables, it is our belief that regulations can be better enforced by controlling air emissions or other discharges according to source limits rather than according to limits at the receptor. Therefore, this should be the basis for control strategy for normal operations. For normal conditions, limits should be established for long-term environmental protection. Suncor prefers the concept of averaging short-term releases to meet a long-term limit.

Plant start-ups and shut-downs are unique situations and highly unstable from a process operation and control point-of-view. Also a number of unforeseen or emergency situations may arise despite the best efforts by the operator to minimize them. Therefore stack emission limits which are normally achievable during periods of steady state operation are difficult to manage during start-ups and shut-downs due

to the unsteadiness in the process. Plant upset conditions can arise due to a temporary malfunction of an instrument or changing feed rate or power failures. Generally, all abnormal scenarios are short-term with unsteady state conditions which require a specific response time to rectify. We, therefore, believe that short-term air emission and effluent discharge limits and their duration should be based on factors such as hazardousness of release, process control options, and potential rates of release. This implies a contingency plan to deal with these short-term pollution episodes.

This two-limit control strategy is applicable to point source discharges of air emission and liquid effluents and benefits the regulator, the operator, and the environment. To the regulator this approach is easily enforceable with clear accountability to the public. The operator realizes no unreasonable production cutbacks and can manage emissions with no onerous requirements. Long term environmental effects are minimized and the frequency of short-term episodes are controlled.

4.2 Due Diligence

From previous discussions, it is obviously evident that planned and unforeseen abnormal conditions will arise. An effective and clear contingency plan is essential in order that diligence can be assessed.

A multitude of factors can lead up to an instance where compliance can be questioned, especially when a particular standard is not met. For example, some situations may have consequence which a company may reasonably be expected to foresee of prevent, but may not be within the operator's realm of control and/or may take time to react effectively to the appropriate response. An enforcement agency must be capable of recognizing and appreciating the efforts a company makes in trying to meet the requirements, plan for unforeseen situations, and respond with due diligence.

Suncor believes that the diligence principle in environmental law enforcement is of paramount importance. We propose that diligence be assessed more objectively and the assessment should resolve around the contingency plan for abnormal situations.

4.3 Consultative Approach

We strongly believe that the existing management approach by Alberta Environment in dealing with compliance enforcement with industry is fundamentally sound and workable. The hierarchy of enforcement from monitoring, technical consultation and all the way up to prosecution is directionally correct. It reflects a systematic, stepwise procedure allowing room for both sides to consult each other's views and plans and allows time for the industry to respond appropriately to compliance concerns. We strongly believe that the consultative approach using quality dialogue achieves much better compliance results and build up mutual trust and relations compared to the "hammer" approach or stricter penalties and fines. Prosecution and court proceedings have demonstrated counter-productiveness and loss of credibility for all parties involved. Also, equally important in the consultative enforcement approach, is the input from the public which should be exchanged with Alberta Environment (who have the ultimate enforcement authority) through appropriate agencies or vehicles. We recommend that the consultative approach to enforcing compliance be continued.

4.4 "Single Window" Regulation

This expression is commonly heard but cannot be over-emphasized. Some of the problem areas have been discussed previously. The Development and Reclamation Approval process in Alberta is a workable approach which uses the one-window concept. We believe this process should be a role model for administration of regulations. Dual regulation frustrates both the regulator and operator resulting in poor enforcement.

4.5 Public Education

The general public need to understand compliance performance information, pollution control systems, and environmental impact studies. This is largely an educational process for which the operator and regulator must be jointly accountable.

5.0 Conclusions and Recommendations

The major conclusion that can be drawn from the foregoing discussion of problem areas and proposed enforcement principles is that Alberta Environment has the necessary legislation and enforcement framework but is not applying it effectively. The department's legislation enforcement approach has been recognized beyond the province. Alberta Environment has also a role model in the D and R Approval process and the current process of promulgating new Hazardous Waste Regulations. (The enforcement of the latter must yet be tested.) We believe that the credibility of Alberta Environment's enforcement approach is being downgraded because of the previously mentioned problem areas.

Our recommendations are based on observed deficiencies and the fundamental principles outlined in the previous sections. These are as follows:

- Alberta Environment Pollution Control and Standards and Approval Division must review their organization and staff requirements. This will ensure the negotiation of realistic licenses acceptable to all parties concerned and more effective regulating of licensed operations.

- Continue the current "consultative" enforcement protocol. Establish a more objective system of assessing diligence.

- Resolve jurisdictional conflicts with other regulatory agencies.

- Upgrade public education programs with emphasis on compliance interpretation.

- Revise or rescind environmental standards in regulations. This will enable the writing of site specific and operation specific licenses.

SHELL CANADA - FACSIMILE COVERSHEET

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		COVERSHEET FOR: ☐ DOMESTIC ☐ FOREIGN/ ★ INTERNATIONAL	PAGE 1 OF _ INCL. COVERSH
ADDRESSEE		FROM: ORIGINATOR	
COMPANY: ALBERT ENVIRONMENT		COMPANY: (* Cable Address/Reference Indicator) SHELL CANADA LIMITED CALGARY	
ATTENTION: Ms. J. FLETT		SENT BY: (* or Authorized Signature) TEWOOD	
ADDRESSEE'S LOCATION 13720-101 AVE EDMONTON		LOCATION (Building and Room No.):	
FACSIMILE PHONE NO: 422-6305	CONFIRMATION PHONE NO:	FACSIMILE PHONE NO: (403) 232-4183	DEPT. CHARGE CODE

REMARKS

ENVIRONMENTAL LAW ENFORCEMENT
REVIEW PANEL

THIS SECTION TO BE COMPLETED BY OPERATOR

Shell Canada Limited

Head Office
400 - 4th Avenue S.W.
P.O. Box 100, Station M
Calgary, Alberta T2P 2H5
(403) 232-3111

October 5, 1987

J. Flett, Secretary
13720 101 A Avenue
Edmonton, Alberta
T5N 0L1

Subject: Review Panel on Environmental Law Enforcement

Dear Ms. Flett:

Appended is a copy of my material for presentation to the Review Panel on October 13, 1987.

Yours very truly,

T.E. Wood
Senior Engineer, Safety and Environmental Affairs

An official sponsor
of the Calgary 1988
Olympic Winter Games

ENFORCEMENT OF ENVIRONMENTAL LEGISLATION

OBSERVATIONS OF THE ONTARIO EXPERIENCE

T.E. WOOD

OCTOBER 13, 1987

ENFORCEMENT OF ENVIRONMENTAL LEGISLATION
OBSERVATIONS OF THE ONTARIO EXPERIENCE

BY T.E. WOOD
OCTOBER 13, 1987

MY PRESENTATION TODAY WILL DEAL WITH THE TRENDS IN ENVIRONMENTAL ENFORCEMENT IN THE PROVINCE OF ONTARIO FROM THE EARLY 1980'S TO THE PRESENT DAY, AND THE EFFECTS ON THE ATTITUDES OF BOTH INDUSTRY AND GOVERNMENT OF THESE CHANGES.

BEFORE I GET TOO FAR ALONG I SHOULD TELL YOU A LITTLE ABOUT MYSELF.

I AM PRESENTLY A SENIOR ENGINEER WITH SHELL CANADA'S SAFETY AND ENVIRONMENTAL AFFAIRS GROUP IN CALGARY. PRIOR TO THAT I WAS ENVIRONMENTAL SUPERVISOR AT SHELL'S SARNIA ONTARIO REFINERY. AT THE SAME TIME AS THAT ASSIGNMENT, I SERVED AS CHAIRMAN OF THE LAMBTON INDUSTRIAL SOCIETY'S TECHNICAL COMMITTEE REVIEWING OVERALL COOPERATIVE ENVIRONMENTAL PROGRAMS FOR A DOZEN MAJOR INDUSTRIES IN THE SARNIA AREA. PRIOR TO MY EMPLOYMENT WITH SHELL I SPENT 14 YEARS ON THE OTHER SIDE OF THE FENCE WITH THE ONTARIO MINISTRY OF THE ENVIRONMENT AS A SENIOR ENVIRONMENTAL OFFICER. MY MAJOR PERSONAL INTEREST IN THE ENFORCEMENT PROCESS STEMS FROM MY EXPERIENCE IN 1986 WHEN I WAS PERSONALLY CHARGED WITH 12 VIOLATIONS OF THE ONTARIO EPA BY THE MINISTRY OF THE ENVIRONMENT.

WHAT I HOPE TO DO TODAY IS SHARE MY OBSERVATIONS AS AN ENFORCEMENT OFFICER, COMPANY ENVIRONMENTAL COORDINATOR, GENERAL INDUSTRY LIAISON, AND CHARGED INDIVIDUAL WITH YOU.

A BIT OF A HISTORICAL REVIEW.

IN ONTARIO FROM THE 1960'S UNTIL THE 1980'S ENVIRONMENTAL FIELD STAFF WORE TWO HATS - ENFORCEMENT AND ABATEMENT. I, LIKE MOST OF THE STAFF, ATTEMPTED TO ACHIEVE THE GOALS OF ENVIRONMENTAL LEGISLATION BY CONSULTATION, NEGOTIATION, AND ESTABLISHMENT OF PROGRAMS WITH INDUSTRY. LEGAL ACTION WAS INFREQUENT AND RESERVED FOR FLAGRANT AND WILLFUL VIOLATIONS OF THE ACT. DATA FROM THE LAMBTON INDUSTRIAL SOCIETY SHOWS SUBSTANTIAL IMPROVEMENTS IN BOTH THE AIR AND WATER QUALITY DURING THIS PERIOD.

CHANGING PUBLIC OPINION IN THE EARLY 1980'S LED TO PROPOSALS TO FORM A SEPARATE BRANCH TO SEGREGATE ENFORCEMENT AND INVESTIGATIONS FROM ABATEMENT. THE REASONS GIVEN FOR THE ESTABLISHMENT OF SUCH A GROUP WERE THAT:

1. THE ENFORCEMENT OF THE ENVIRONMENTAL REGULATIONS NEEDS A STAFF OF INDIVIDUALS TRAINED IN THE CONDUCT OF INSPECTIONS.

2. ANY ENFORCEMENT SHOULD BE IMPARTIAL AND EVEN HANDED. THIS CANNOT BE ACHIEVED THROUGH ABATEMENT STAFF WHO HAVE TO WORK SO CLOSELY WITH INDUSTRY THAT THEY FEEL AN OWNERSHIP WITH INDUSTRIAL PROBLEMS AND THEIR RESOLUTION.

3. IT IS NOT FAIR TO EXPECT THE ENVIRONMENTAL STAFF TO DECIDE WHICH OF THEIR TWO HATS TO WEAR OR TO CHANGE HATS AS THE SITUATION DEVELOPS.

AS CREATED, THE INVESTIGATION AND ENFORCEMENT BRANCH MET ALL THE DESIRABLE CRITERIA. IT WAS STAFFED WITH TRAINED INVESTIGATORS, IT WAS SEPARATE FROM THE ABATEMENT SECTION, AND IT HAD A MANDATE FROM THE MINISTER TO SEEK OUT AND PROSECUTE INDUSTRIES AND PERSONS VIOLATING THE ENVIRONMENTAL PROTECTION ACT.

AFTER THE IEB HAD BEEN AROUND FOR A VERY SHORT TIME THE GENERAL INDUSTRIAL OPINION OF THE GROUP STARTED TO FORM. INDUSTRY SAW THAT:

1. THE INVESTIGATORS WERE MOSTLY EX-OPP, RCMP, AND CUSTOMS AGENTS WHO WERE USED TO DEALING WITH PURPOSEFUL LAW BREAKERS. THEY EXPECTED INDUSTRY TO ACT LIKE THEIR PREVIOUS 'CLIENT GROUP'. ACCORDINGLY THEY TENDED TO TREAT INDUSTRIAL STAFF LIKE CRIMINALS.

2. THE EIB STAFF'S MAJOR TECHNICAL AND PERSONAL SKILLS RELATED TO INVESTIGATION AND INTERROGATION. THEY HAD LIMITED KNOWLEDGE OR UNDERSTANDING OF PLANT PROCESSES, CHEMISTRY, OR SCIENCE. ACCORDINGLY TECHNICAL DISCUSSIONS REGARDING EMISSION INCIDENTS WERE LONG AND CONVOLUTED.

3. THE IEB STAFF HAD NO LONG TERM STAKE IN MAINTAINING GOOD RELATIONS WITH INDUSTRY. THEY CREATED A LOT OF BAD FEELINGS IN PURSUIT OF THEIR GOALS. AFTER THEY HAD DONE THEIR WORK, THIS LEGACY WAS LEFT FOR THE LOCAL ABATEMENT STAFF TO LIVE WITH.

4. THERE WAS NO REASONING WITH THE IEB. THEY KNEW THAT INDUSTRY WAS NOT TO BE TRUSTED.

5. Relations with the Abatement staff fell off. Since the IEB were as happy to go after Abatement as industry, Abatement staff did not want to be seen to associate with the enemy. In addition industry felt that any request for assistance with an environmental problem made to Abatement would be reviewed for potential enforcement action by the IEB.

6. In general, government Abatement and Approvals staff spent a significantly higher amount of time on minor procedural matters, obtaining several legal opinions, and generally questioning insignificant details of applications brought to them by industry. This increased the time required to obtain Certificates of Approval and conduct hearings. Progressive action to put in environmental control systems was slowed.

As I stated in my introduction I have had very close dealings with Ontario's enforcement staff. I had a unique opportunity to observe their activities and the effect on the employees and attitudes at my own company and several others in Sarnia. It is not my intention to talk about the charges brought against either Shell Canada or myself but only the effects the investigation produced.

In brief my observations were:

1. Environmental staff, managers, and a wide range of plant personnel were tied up for almost all of every workday for a year in an unending series of meetings, interviews and

LEGAL DISCUSSIONS. THIS LEFT LITTLE OR NO TIME FOR IMPROVING THE STATUS OF ENVIRONMENTAL CONTROL AT THE SITE.

2. THE INVESTIGATION PUT FURTHER STRAIN ON THE RELATIONSHIP WITH THE ABATEMENT STAFF. THE COMPANY CHARGED WAS CONCERNED THAT ANY DISCUSSION MIGHT REVEAL SOMETHING THAT WOULD AID THE IEB'S CASE, AND I AM SURE THAT THE ABATEMENT STAFF FELT THAT THEY MIGHT INADVERTENTLY HELP THE COMPANY'S DEFENCE.

3. THE INVESTIGATORS USE OUT OF CONTEXT STATEMENTS OR NOTES FROM COMPANY FILES IN THE PREPARATION OF THEIR CASE. THIS QUICKLY TAUGHT THE COMPANY TO BE VERY CONCERNED ABOUT PUTTING ANYTHING TO WRITING.

I DO NOT KNOW OF ANY COMPANY IN SARNIA THAT ADOPTED A POLICY OF STONEWALLING REQUESTS FROM THE MOE AS A RESULT OF ENFORCEMENT ACTIONS. MANY FIRMS, HOWEVER, DID BECOME CAUTIOUS IN ALL DISCUSSIONS WITH THE GOVERNMENT, REQUIRING FORMAL REQUESTS FOR EVEN THE MOST TRIVIAL DATA AND LEGISLATED JUSTIFICATION FOR ANY ACTIVITY.

THE FEAR OF HAVING WRITTEN COMMENTS USED IN FUTURE COURT ACTIONS IS HAVING A VERY NEGATIVE EFFECT ON IN-PLANT COMMUNICATIONS. THIS IS VERY COUNTERPRODUCTIVE.

4. THE INVESTIGATORS INTEND TO PROVE THEIR WORTH BY FINDING AND INITIATING ACTION AGAINST AS MANY INFRACTIONS AS POSSIBLE. THIS RESULTS IN LAYING CHARGES FOR ADMINISTRATIVE DEFICIENCIES

AND NON-COMPLIANCE WITH TECHNICALITIES OF STATUTES. IF THE OBJECTIVE OF A STRONG AND MEANINGFUL ENFORCEMENT POLICY IS TO PROJECT AND ENHANCE ENVIRONMENTAL QUALITY, AN ENFORCEMENT GROUP CAN ONLY GO AFTER SUBSTANTIVE MATTERS THAT DIRECTLY IMPACT ON THE ENVIRONMENT. DILUTION OF THIS PURPOSE TO GET THE NUMBERS UP DISCREDITS THE WHOLE SYSTEM.

IF ASKED WHAT I WOULD RECOMMEND TO THIS PROVINCE ON HOW TO ACHIEVE ITS GOALS OF ENHANCING ENVIRONMENTAL QUALITY I WOULD SUGGEST THAT GREATER ADVANCES CAN BE MADE BY COOPERATION RATHER THAN CONFRONTATION.

MOST FIRMS HAVE A GENUINE DESIRE TO BE GOOD CORPORATE CITIZENS. THIS IS REFLECTED IN OUR POLICIES, PROGRAMS, AND PROCEDURES RELATING TO A WIDE VARIETY OF ISSUES, NOT JUST THOSE RELATING TO THE ENVIRONMENT. A STRONG RELIANCE ON ABATEMENT, WITH GOVERNMENT AND INDUSTRY AWARE OF THEIR COMPLIMENTARY ROLES, WILL ALLOW US TO MEET THE COMMON GOAL OF ENVIRONMENTAL QUALITY.

ENFORCEMENT THROUGH PROSECUTION SHOULD ALWAYS BE AVAILABLE AS A LAST RESORT. I SUPPORT PROMPT AND EFFICIENT ENFORCEMENT OF THE ENVIRONMENTAL STATUTES WHEN THERE HAS BEEN A FLAGRANT OR WILLFUL DISREGARD FOR THE LAW, OR WHEN THERE HAS BEEN A SIGNIFICANT IMPACT ON THE ENVIRONMENT OR HUMAN HEALTH. USE OF THIS POWER AS A SUBSTITUTE FOR NEGOTIATED SOLUTIONS WILL ALWAYS RESULT IN A NO WIN SITUATION.

SUBMISSION TO THE

REVIEW PANEL

ON

ENVIRONMENTAL LAW ENFORCEMENT

from

ENVIRONMENTAL RESOURCE CENTRE OF ALBERTA
10511 Saskatchewan Drive
Edmonton, Alberta. T6E 4S1

Prepared by:

Marilyn Kansky
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Environmental Law Centre

With the assistance of:
Brad Wylynko

October, 1987

INTRODUCTION

The Environmental Resource Centre of Alberta commends the Government of Alberta for initiating a formal review of enforcement of environmental laws in the province and welcomes the opportunity to present its views to the Review Panel on Environmental Law Enforcement.

The Centre is a nonprofit society which was founded in 1979 to engage in educational activities and act as an advocate and consultant on environmental matters to ensure the preservation of Alberta's environmental quality. Funding is provided through federal, provincial and municipal grants and the support of individual donors for work focusing primarily on issues of provincial importance.

From its involvement in both federal and provincial issues over the past eight years, the Resource Centre has concluded that although strong environmental laws are essential to ensure environmental protection, without adequate enforcement of those laws, the practical result is inadequate regulation of activities which may pollute Alberta's environment. Establishing an effective environmental law enforcement program is thus critical for achieving the ultimate objective of all environmental legislation, namely environmental protection.

The importance of environmental protection was recognized by the

National Task Force on Environment and Economy which accepted two principles held in common with the World Commission on Environment and Development. These principles are that environmental and economic planning cannot proceed in separate spheres and that long-term economic growth depends on a healthy environment. (1)

The significance of the Review Panel is therefore viewed by the Resource Centre as an important first step towards strengthening the enforcement of Alberta's environmental laws. In the long-term, the Review Panel has the potential to have an impact on the strengthening and stabilization of Alberta's economy.

Because of its commitment to environmental protection and a strong Alberta economy, the Environmental Resource Centre is presenting this submission with a view to identify and make recommendations concerning procedures which should be adopted and amendments to the environmental legislation which should be implemented to secure more effective enforcement of Alberta's environmental legislation. In several instances, references are made to the British Columbia model as a comparative mechanism.

I. FORMAL, WRITTEN POLICY ON ENFORCEMENT

1.0 A FORMAL, WRITTEN ENFORCEMENT POLICY SHOULD BE IMPLEMENTED AND MADE PUBLIC.

A public, written enforcement policy which has been formally adopted by the government will provide clear guidelines to Department of Environment staff who are responsible for the enforcement of environmental laws as well as provide an indication of the commitment of government to enforcement of the laws.

1.1 THE FORMAL ENFORCEMENT POLICY MUST INCLUDE A COMMITMENT TO FULLY PROSECUTE ENVIRONMENTAL OFFENDERS.

At present, both British Columbia and Alberta's Environment Departments are utilizing the negotiation method to secure enforcement of environmental laws. As is stated by Alberta Environment in their informal policy guidelines "Approach to Pollution Control, Environmental Enforcement Program", "The overall program is based on the premise that environmental protection can best be achieved on the basis of co-operation and negotiation between government and industry". (2)

It is the Resource Centre's view that although co-operation and negotiation should play an important role in setting standards, and determining the terms or conditions that should be placed in any specific licence, once a licence is issued, negotiations should cease. The holder should then be expected to comply with that licence and should know that failure to comply will normally

result in prosecution. The terms of the licence should specify the allowable discharges of the licence holder during normal operations, including starting up and shutting down so that the licence holder is not out of compliance with the licence for reasonable, anticipated operations. Ceasing negotiations once the licence is issued will result in a more coherent system whereby industry, government staff and the public will be aware of the expectations placed on licence holders.

Several studies which have analysed the enforcement of environmental laws in British Columbia have concluded that negotiation is not a satisfactory mechanism to secure compliance with environmental laws.

In 1980, the Fraser River Task Force which was appointed by the British Columbia government to investigate all illegal sources of pollution in the lower Fraser River reported the following as its most important recommendation:

> "11. That the Ministry make a major attempt to change the past philosphy of Waste Management Branch from "non-enforcement" to "enforcement". This is the most important recommendation that we, as a Task Force and concerned employees can make. Without this new attitude and philosophy, our work in making the companies and public aware of the problems we face will be to little avail." (3)
>
> (It is clear from the text that enforcement is used to

mean "prosecution".)

Similarly, in 1982, Peter Pearse, the Commissioner of the federally appointed Commission on Pacific Fisheries Policy, in referring to prosecutions recommended that:

> "The Department (i.e. Fisheries and Oceans) should abandon its vague and inappropriate credible voluntary deterrence program as its primary aim in enforcement and replace it with a vigorous and well-organized enforcement capability in line with the recommendations made below." (4)

In addition, in 1981, as a result of a comprehensive audit of the British Columbia Ministry of Environment, Waste Management Branch, the Auditor General of British Columbia concluded:

> "9.185 The Ministry has not developed a clear policy on appropriate responses to non-compliance. Instead, it had tended to rely on negotiation and persuasion as its primary means of achieving compliance. The analysis of our sample of permits indicated that a more stringent structural approach may be required." (5)

There are several reasons that the existing enforcement policy should be changed so that negotiations cease once a licence is issued and prosecution is initiated when there are violations of environmental laws.

First, the failure of the Pollution Control Division to initiate prosecutions for violations is one of the principle reasons that the public has lost confidence in the government's enforcement of

environmental laws. The public view that industrial offenders of environmental laws are afforded special treatment arises because of comparison with what occurs to an individual member of the public when confronted with breaches of other laws such as impaired driving or speeding.

Second, the present system is confusing, making it unclear to all parties involved, including the public, when a technical review or directive will result in a further response of issuing a control or stop order or commencing a prosecution. Furthermore, the criteria which the Pollution Control Division uses in deciding which response option should be used, such as the seriousness of health or environmental impact, are factors which are more appropriately dealt with as mitigating factors to be taken into account in sentencing.

Third, adopting the approach suggested by the Resource Centre will encourage further compliance as respect for environmental laws increases and punished offenders serve as a deterrence to would-be offenders. On the other hand, the current public knowledge that offenders of environmental laws will likely go unprosecuted can only lead to further disregard of the laws and thus increased violations.

Fourth, the existing process may be acting as an impediment to successful prosecutions once a decision is made to prosecute. This was an observation of the Fraser River Task Force which

reported that the failure to lay charges can result in situations of tacit approval by the government of the offence and rule out the possibility of prosecution at a later date. (6)

Fifth, adoption of a policy to fully prosecute environmental offenders is simply giving practical effect to what has been proclaimed by the Legislature, that certain actions are deemed to be offences which should be punished in accordance with the law.

For these reasons, the Resource Centre recommends implementation of an enforcement policy to fully prosecute environmental offenders. The policy should be formally adopted by the government, written and made available to the public.

1.2 THE GOVERNMENT SHOULD IMPLEMENT A POLICY OF CHARGING OFFICERS AND/OR DIRECTORS OF A COMPANY IN ADDITION TO THE COMPANY ITSELF. SPECIFIC STATUTORY PROVISIONS THAT OFFICERS AND DIRECTORS ARE LIABLE TO BE PROSECUTED FOR AN OFFENCE WHETHER OR NOT THE COMPANY IS CHARGED SHOULD BE PROVIDED.

Because it is possible for a defendant company to appear in court through its counsel or agent, it is possible for company officials who were ultimately responsible for the offence to retain a low profile and hence remain unaccountable for an offence which has occurred. As well, these officials are able to avoid the social stigma of a conviction and the resulting record.

Prosecuting the individuals who are the "directing minds" of a company will act as a strong deterrence to violation of environmental laws and thus ultimately improve compliance. Company officials are much more likely to pay closer attention to potential violations if they know they will be held personally accountable. As well, the prosecution will be able to proceed even if the company goes out of business.

II. ALTERATION OF THE DEPARTMENT OF ENVIRONMENT STRUCTURE AND PROCEDURES

2.0 THE STRUCTURE OF THE DEPARTMENT OF ENVIRONMENT, POLLUTION CONTROL DIVISION, SHOULD BE ALTERED SO THERE IS A DIVISION BETWEEN THE AGENCIES RESPONSIBLE FOR ISSUANCE AND MONITORING OF LICENCES AND SURVEILLANCE AND CONTROL, AND FOR PROSECUTION OF OFFENCES FOR VIOLATIONS OF ENVIRONMENTAL STATUTUES.

It is the view of the Resource Centre that it is the structure of the Department of Environment itself which is contributing to the existing enforcement problems of the Department and the negative public opinion which has resulted.

Because the Division staff develop ongoing working relationships with the parties to whom licences are issued, it places them in a conflict of interest situation to have to lay charges against

others with whom they have long, personal, working relationships. Conservation officers in British Columbia have experienced similar difficulties in laying charges against permit holders with whom they have had long working relationships.

2.1 A SPECIAL ENFORCEMENT UNIT SHOULD BE ESTABLISHED CONSISTING OF SUFFICIENT, TRAINED, TECHNICAL STAFF (INCLUDING OFFICERS, BIOLOGISTS AND ENGINEERS) AND LEGAL COUNSEL WHO WILL WORK TOGETHER AS A TEAM TO PROSECUTE OFFENDERS. LEGAL COUNSEL SHOULD BE DIRECTLY RESPONSIBLE TO THE ATTORNEY-GENERAL FOR THE CONDUCT OF ENVIRONMENTAL PROSECUTIONS, AS THEY ARE FOR ALL OTHER PROSECUTIONS. WRITTEN REASONS WHICH ARE MADE AVAILABLE TO THE PUBLIC SHOULD BE PROVIDED WHEN A DECISION IS MADE BY THE ATTORNEY-GENERAL TO STAY (I.E. STOP) PROCEEDINGS.

A Special Enforcement Unit should be established which has a clear mandate to prosecute for violations of licences, environmental laws and/or regulations. The team would work closely with Department of Environment staff who would be responsible for issuing and monitoring of licences.

The final decision whether or not to prosecute should rest with legal counsel assigned to the team, although a structure should be implemented which encourages ongoing consultation and co-ordination with the enforcement team and Department staff. By adopting this structure, the checks and balances that exist

within the criminal justice system will be brought into play to ensure that cases which should not be before the courts are not. These checks and balances include the discretion of the Attorney-General to intervene and stay the proceedings.

The creation of the Special Enforcement Unit is important for several reasons. First and most important is that the necessary expertise is developed to ensure success in those prosecutions which are undertaken. This high level of expertise is necessary at all stages including the gathering of evidence, preparation and analysis of scientific materials and laboratory reports, and the co-ordination involved in trial preparation and conduct. Because of the complexity of the cases, experienced legal counsel is essential to supervise, review and co-ordinate the work of the enforcement team from the investigative stages.

Second, the existence of a highly successful prosecution team will act as a deterrence to those licence holders and others who may be contravening the law.

Third, the creation of the team will remove the current conflict of interest experienced by Division staff in their dual roles as ongoing negotiators and those responsible for laying charges.

The creation of a permanent Special Enforcement Unit was recommended by both the Fraser River Task Force and the Commission on Pacific Fisheries Policy. (7)

2.2 A COMPREHENSIVE TRAINING PROGRAM FOR ALL TECHNICAL STAFF OF THE SPECIAL ENFORCEMENT UNIT SHOULD BE IMPLEMENTED.

This training program should include courses on interpretation of relevant environmental statutes, regulations and licences; sampling procedures and techniques; collection of evidence including witness statements and photographs; preservation and continuity of evidence; search and seizure powers of officers; interview techniques and testifying in court. Similar recommendations were made by the Fraser River Task Force. (8)

2.3 LABORATORY FACILITIES FOR RESEARCH AND TESTING SHOULD BE UPGRADED IF NECESSARY. SAMPLES PROVIDED BY THE PUBLIC SHOULD BE ANALYSED BY ALL PROVINCIAL AND FEDERAL LABORATORIES FREE OF CHARGE.

A review of existing laboratory facilities in the province should be undertaken and facilities and personnel should be expanded if necessary to enable fast, comprehensive and accurate analysis of materials submitted by the Special Enforcement Unit. The availability of laboratory analyses to the public will encourage a greater role by the public in monitoring pollution and hence in protecting the environment.

2.4 A FORMAL PROCESS SHOULD BE IMPLEMENTED TO ENABLE CONSULTATION WITH INDUSTRY AND THE PUBLIC ON SETTING STANDARDS AND ISSUING LICENCES, BEFORE FINAL DECISIONS ARE MADE. THE PROCESS SHOULD INCLUDE ADEQUATE PUBLIC NOTIFICATION TO ALLOW A FULL PUBLIC RESPONSE.

In order to increase public understanding of the complex processes and decisions involved in issuing licences and to provide an opportunity for public input, the legislation should be amended to include provisions which will create a public consultation process. It is recommended that this process include the opportunity for public review of licence applications and for input before final decisions are made and before licences are issued. Such a process could include provisions for written submissions and meetings or hearings where necessary.

The opportunity for such public input before decisions are made will help to negate the adversarial situation which is created when public input is permitted after government and industry have already finalized details of an agreement.

It has been the experience in British Columbia that citizens' groups are placed in an adversarial role because their only recourse is appealing pollution permits once final decisions have been made and industry and government have inevitably become entrenched in their positions.

2.5 AN INTERDEPARTMENTAL REVIEW INCLUDING ALL RELEVANT FEDERAL AND PROVINCIAL GOVERNMENT AGENCIES SHOULD BE CONDUCTED DURING THE APPLICATION STAGE OF THE LICENCING PROCESS TO SOLICIT COMMENTS FROM AGENCIES WHICH MAY HAVE CONCERNS ABOUT THE PROPOSED EMISSIONS OR DISCHARGES.

An interdepartmental review conducted before licences are issued or final decisions are made will avoid the possibility of later conflicts between government departments and ensure that all aspects of environmental impact are considered. The inter-departmental review could be juxtaposed or form part of the aforementioned public review.

2.6 AN APPEAL PROCESS SHOULD BE IMPLEMENTED WHICH INCLUDES A RIGHT TO A HEARING FOR THOSE WHO OBJECT TO THE ISSUANCE OR NON-ISSUANCE OF A POLLUTION LICENCE OR ANY OTHER DECISION OF THE DIVISION DIRECTOR OR DEPARTMENT STAFF MADE PURSUANT TO AN ENVIRONMENTAL STATUTE.

In the event that a licence holder or a member of the public disagrees with a decision not to issue or to issue a licence or any term thereof, recourse should be available to a formal appeal process for review of that decision. Such a process would ensure that both industry and the public are afforded a full opportunity to make their views known and make full representations to an independent body which would affirm, overrule or vary the

appealed decision.

In British Columbia such an appeal process is created by statute. (9) Pursuant to this process, panels of one or more members preside over hearings held to determine the relevant issues of the appeal. The panelists are selected from approximately 15 government apppointed panel members, consisting of scientists, engineers and doctors. The hearings are generally held in the region where the Waste Management Permit will be in effect so that individuals and organizations from the affected community will be able to make both oral and written representations. The hearings are conducted somewhat formally and there is an opportunity for cross-examination of witnesses. Although there has been a great deal of valid criticism about several aspects of the British Columbia appeal process, generally the existence of the Environmental Appeal Board has received public support.

Although it is recommended that a similar appeal process should be created in Alberta, because of the complexities involved, it is further recommended that a public consultation process on the detailed structure of the process be held.

2.7 A TECHNICAL AND LEGAL REVIEW OF ALL LICENCES SHOULD BE COMMENCED IMMEDIATELY TO ENSURE ENFORCEABILITY OF THE LICENCES. THERE SHOULD BE AN OPPORTUNITY FOR PUBLIC CONSULTATION IN THIS PROCESS.

Because of the existing policy and structure of the Pollution Control Division which has de-emphasized prosecution, existing licences may contain provisions which are not technically or legally enforceable. A review and amendment of these licences will increase the success rate of prosecutions by the Special Enforcement Unit and hence improve the public's attitude towards the Department's enforcement of environmental laws.

2.8 A SYSTEMATIZED CASE REPORTING SYSTEM SHOULD BE DEVELOPED TO PUBLISH REASONS FOR JUDGMENT AND SENTENCING REMARKS FOR ALL ENVIRONMENTAL CASES, INCLUDING DECISIONS OF ANY APPEAL BOARD WHICH IS CREATED. ALL REASONS SHOULD BE READILY AVAILABLE TO INTERESTED MEMBERS OF THE PUBLIC.

Such a case reporting system will ensure that systematic records are kept of the outcome of prosecutions throughout the province. These records will be of assistance to the Special Enforcement Unit, lawyers and judges and to those conducting the evaluation of the effectivess of the enforcement system.

III. CHANGES TO ENVIRONMENTAL LEGISLATION

3.0 ALL ENVIRONMENTAL LEGISLATION SHOULD PROVIDE THE SAME POWERS OF SEARCH AND SEIZURE TO ALL INSPECTORS AND INVESTIGATIVE STAFF AS THAT PROVIDED UNDER THE CRIMINAL CODE.

Although it is desirable for investigating personnel to have broad search and seizure powers which will permit the collection of sufficient evidence for prosecution, compliance with the Canadian Charter of Rights and Freedoms is mandatory. Utilizing previously tested legislation will ensure that cases are not lost in court because of an infringement of Charter rights.

3.1 WHEREVER POSSIBLE, LEGISLATIVE PROVISIONS SHOULD BE IMPLEMENTED WHICH SIMPLIFY THE EVIDENTIARY BURDEN ON THE CROWN IN PROVING THAT AN OFFENCE OCCURRED. WITH THE ASSISTANCE OF SENIOR CROWN COUNSEL AND ENVIRONMENTAL PROSECUTORS IN ONTARIO, A REVIEW SHOULD BE UNDERTAKEN TO EXPLORE POSSIBLE PROVISIONS.

For example, in order to avoid the defence that was raised in the Suncor trial, that the monitoring data of the company was inaccurate, a provision could require that the data will be admissible in evidence as conclusive proof of the facts therein, unless within a certain period of time the company has provided written notice of the inaccuracy of the data. A comprehensive review of other possible evidentiary provisions should be explored.

3.2 A REVIEW OF FINES AND SENTENCING PROVISIONS IN THE LEGISLATION SHOULD BE CONDUCTED WITH A VIEW TO SUBSTANTIALLY INCREASING MAXIMUM AND MINIMUM FINES. PROVISION SHOULD ALSO BE

MADE FOR HIGH MINIMUM FINES FOR SECOND AND SUBSEQUENT OFFENCES.

Both maximum and minimum fines in all environmental legislation should be increased to reflect the seriousness of environmental offences and to ensure that pollution and low court fines are not viewed as the cost of doing business.

3.3 THE LEGISLATION SHOULD PROVIDE THAT AN OFFENCE IS DEEMED TO BE A SEPARATE OFFENCE FOR EACH DAY THE OFFENCE OCCURS.

This provision will increase the incentive for companies and individuals to comply with licences and laws as quickly as possible and to install the appropriate pollution technology necessary to do so. The fines must be high enough so it is not more cost effective to pay a fine rather than install pollution devices.

3.4 ENVIRONMENTAL LEGISLATION SHOULD BE BINDING ON ALL GOVERNMENT DEPARTMENTS, AGENCIES AND CROWN CORPORATIONS.

Because government agencies or corporations often undertake large projects which can have a tremendous impact on the environment, it is important that these projects are conducted in accordance with the environmental laws of the province. It is also important that a situation does not exist where there is one set

of environmental rules for the government and another for industry, thus creating a sense of unfairness in the enforcement process.

IV. EVALUATION OF ALBERTA'S EXISTING ENFORCEMENT PROGRAM

4.0 THE GOVERNMENT SHOULD IMPLEMENT AN ONGOING PROGRAM FOR INDEPENDENT EVALUATION WHICH WOULD BE CONDUCTED BY PARTIES OUTSIDE THE DEPARTMENT OF ENVIRONMENT TO DETERMINE THE EXTENT OF COMPLIANCE WITH LICENCES AND ENVIRONMENTAL LAWS IN ALBERTA. THIS EVALUATION SHOULD BE MADE AVAILABLE TO THE PUBLIC.

4.1 THE SIGNIFICANCE OF THE ENVIRONMENTAL IMPACT FROM ANY NON-COMPLIANCE SHOULD BE INCLUDED IN THE INDEPENDENT EVALUATION.

A reliable data base and analysis indicating the extent of compliance should be available to enable a comprehensive analysis of any existing program of enforcement. In order to ensure the accuracy of such an assessment, it should be conducted by parties outside the Department of Environment, rather than Department staff, who may understandably be reluctant to produce an unfavorable self-assessment.

Without the availability of an independent analysis, those conducting a review of enforcement effectiveness are put in the position of having to rely on the opinions of Pollution Control

Division staff as to whether or not they have been effective in their work. Any unreliability in self-assessment becomes difficult to determine because of the highly technical nature of the data involved. As well, the public may not be of assistance here because of their lack of resources to obtain the expertise to help them interpret any data which is available. This makes it difficult to counter assertions by the government agency involved that there is nothing wrong with the current enforcement program and that compliance is being achieved.

In conducting the independent evaluation, non-compliance reports should include information as to whether the non-compliance has resulted in significant environmental impact. Statistics that indicate an enforcement program is achieving a certain percentage compliance can be misleading because even a small percentage out of compliance can result in extreme damage to the environment.

The situation in British Columbia at present is a good illustration of the public skepticism which can result when a current independent analysis of the effectiveness of an enforcement program is not available.

The present public position of the Ministry of Environment of British Columbia is that they are currently achieving 90 percent compliance with pollution permits issued under the Waste Management Act. (10) The public has serious concerns about the accuracy of this assertion because of several government produced

studies which have indicated that non-compliance is widespread.

Commissioner Pearse stated that of approximately 200 permitted discharges into the Fraser River, "a startling 80 percent regularly exceeded the authorized limits of effluent quality of quantity". (11)

The Fraser River Task Force reported that of 40 companies, individuals or government operations which were investigated, 19 were involved in either prosecution or recommendations for prosecution of 51 offences. Some of the remaining 21 investigations did not result in prosecution because of legal restrictions, statute limitations or unenforceability of permits. (12)

As well, the Auditor General of British Columbia concluded that the information available to the Ministry did not serve as a basis for a complete assessment of how the Waste Management Program was operating (13) or for the compliance status of current permit holders. (14) The report also concluded upon review of the compliance status of 69 permits, there was a high incidence of permit violation. (15) 14 of the 39 permits where assessment of compliance was possible were classified as "seriously violating permit conditions". These findings lead the Auditor General to recommend that:

> "9.182 The Ministry should ascertain the extent and severity of non-compliance with permit conditions and

> should develop and implement procedures to bring discharges into acceptable compliance over a reasonable period of time." (16)

In the 1982 Report of the Auditor General in which the Status of Recommendations from the 1981 Report was discussed, none of the aforementioned recommendations were referred to.

It was also reported in an article based on an independent study, "Compliance with Pollution Control Permits in the Lower Fraser Vally 1967-1981", that:

> "From 1967 to 1981, there is abundant evidence of waste dischargers along the lower Fraser exerting considerable and perhaps excessive sway in shaping their pollution control permits, of not complying with the terms of those permits, of degrading water quality and of successfully fending off government challenges in law courts." (17)

The most recent research study on compliance in British Columbia is one which has been undertaken for the Canadian Institute for Advanced Research by Murray Rankin and Richard M. Brown, two law professors at the University of Victoria. This study reviews the state of compliance for permits within two regions of British Columbia. Relying on monitoring data from the companies' monitoring reports, it is the author's opinion that this study is certain to demonstrate consistent non-compliance when the study is publicly released. (18)

In light of these studies, it is understandable that a great deal of public skepticism arose when the British Columbia Ministry of Environment began to assure the public that there is nothing to worry about because compliance is approximately 90 percent. This skepticism increased when the government did not provide any data upon which it based its compliance statistics.

Clearly, this is a situation which can be avoided in Alberta by the implementation of an independent analysis of the government's enforcement program.

4.2 WRITTEN RECORDS SHOULD BE MAINTAINED OF THE REASONS FOR ALL IMPORTANT DECISIONS AND THE RESULTING COMMUNICATIONS BETWEEN DIVISION STAFF AND LICENCE HOLDERS. THESE COMMUNICATIONS SHOULD BE CONFIRMED IN WRITING.

Written records of all important communications between a party and the Pollution Control Division will provide important information on which an accurate evaluation of enforcement mechanisms can be based. As well, this information is extremely important as a basis on which to decide whether a prosecution should be commenced and once a prosecution is undertaken, as background information in preparing the case itself.

V. PUBLIC INVOLVEMENT

5.0 THE GOVERNMENT SHOULD PUBLICIZE THE TOLL-FREE NUMBER FOR PUBLIC REPORTING OF POLLUTION INCIDENTS.

5.1 THE PUBLIC SHOULD BE GIVEN FULL ACCESS TO ALL MONITORING DATA SUBMITTED BY ALL PARTIES, INCLUDING MUNICIPALITIES. AS WELL, DATA SUBMITTED IN ADDITION TO THAT REQUIRED BY A LICENCE SHOULD BE AVAILABLE TO THE PUBLIC.

The Department should continue its policy to provide monitoring data to the public. However, this policy should be expanded to ensure access to all data submitted by a licence holder, whether or not it is a requirement of the licence. In the event that proprietary data is included which could be useful to a competitor, those references could be deleted.

It is critical that this information be made available free of charge. Environmental and other nonprofit organizations are under tremendous financial restraints and the imposition of what seems like a nominal fee for photocopying can preclude access to the information.

5.2 IN ORDER TO FACILITATE PUBLIC REVIEW OF THE AVAILABLE DATA, SUMMARIES OF THE EFFLUENT DISCHARGES AND COMPLIANCE RATES SHOULD BE PUBLISHED AND MADE AVAILABLE TO THE PUBLIC ON A REGULAR BASIS.

5.3 THE PUBLIC SHOULD HAVE FULL ACCESS TO ALL POLLUTION CONTROL DIVISION FILES CONCERNING LICENCES.

Ensuring public access to information contained in Pollution Control Division files will ensure there is a check and balance on the licencing and monitoring practices of the Division and the enforcement of environmental laws. A policy of openness will demonstrate to the concerned public that the government is committed to enforcement and is willing to subject itself to the scrutiny of the public to confirm that commitment. On the other hand, the failure to provide access to files generally indicates to the public that the government is trying to hide something.

5.4 LEGISLATION SHOULD BE AMENDED TO REMOVE ANY BARRIERS TO PRIVATE PROSECUTIONS BY CITIZENS.

The consent of the Attorney-General which is required to prosecute, for example pursuant to s.9.1(9) of the Clean Water Act, eliminates the common-law right of citizens to lay charges and conduct the prosecution for summary conviction offences. All such legislative provisions should be eliminated.

The government should welcome and encourage the public's involvement in the enforcement process. Their involvement will

increase the effectiveness of the enforcement system by ensuring that prosecutions are undertaken for violations which have occurred.

5.5 AS AN INCENTIVE TO ENCOURAGE THE PUBLIC'S ROLE IN PRIVATE PROSECUTIONS, LEGISLATION SHOULD PROVIDE THAT FOR SUCCESSFUL PROSECUTIONS, THE INFORMANT (i.e. THE PARTY LAYING THE CHARGES) WILL RECEIVE ONE HALF OF ANY FINE IMPOSED.

A similar provision has been utilized successfully under the Penalty and Forfeiture Regulation of the Fisheries Act.

VI. IMPROVING ENVIRONMENTAL PROTECTION

6.0 AS NEW DATA BECOMES AVAILABLE, THE TERMS IN LICENCES SHOULD BE PERIODICALLY REVIEWED AND UPDATED. AT A MINIMUM, THE LICENCES SHOULD BE REVIEWED EVERY 2 YEARS.

Enforcement of environmental legislation should not be viewed simply as securing compliance with standards which are set. The process should be viewed as one which increases standards and decreases effluents and emissions to protect the environment as the technology improves and as social values dictate.

6.1 A COMPREHENSIVE MONITORING PROGRAM SHOULD BE IMPLEMENTED TO DETERMINE THE CUMULATIVE IMPACT OF EFFLUENT DISCHARGES OR EMISSIONS ON THE ENVIRONMENT.

At present, it is the practice in Canada to set emission or effluent limits based on an analysis of a specific discharge and the quantities the environment can tolerate at that point. Generally, because of the difficulty in doing so, studies are not done to determine what the cumulative effect on the environment is of all licences issued in a particular area. In order to more accurately assess what the environmental impact will be and what emissions or discharges should be permitted, a cumulative impact monitoring program should be developed.

6.2 THE REPORT AND RECOMMENDATIONS OF THIS REVIEW PANEL SHOULD BE MADE AVAILABLE TO THE PUBLIC.

It is hoped that the public release of the Review Panel's Report and Recommendations will provide the cornerstone of the government's commitment to increasing public confidence in Alberta's environment laws, their enforcement and ultimately, an increase in environmental protection.

FOOTNOTES

(1) Report of the National Task Force on Environment and Economy, September 24, 1987, p.2

(2) November, 1984, p.3

(3) Fraser River Task Force Report, A. Ackerman, B. Clapp, July 30, 1980, p.26

(4) Turning the Tide; A New Policy for Canada's Pacific Fisheries, p.208

(5) Report of the Auditor General, Province of British Columbia for the year ended March 31, 1981, p.131

(6) Fraser River Task Force Report, op.cit., p.14

(7) ibid., p.23; Turning the Tide, op.cit., p.210

(8) Fraser River Task Force Report, op.cit., p.24

(9) Environment Management Act, R.S.B.C.; Environmental Appeal Board Procedure Regulation

(10) Environmental Enforcement Proceedings of the National Conference on the Enforcement of Environmental Law; "The Fraser River Task Force", Earle Anthony, p.79

(11) Turning the Tide, op.cit., p.21

(12) Fraser River Task Force Report, op.cit., p.19

(13) Report of the Auditor General, op.cit., p.107

(14) ibid., p.119

(15) ibid., p.129-130

(16) ibid., p.131

(17) B.C. Studies, No. 72, Leon Kolankiewicz, p.44

(18) For details of this study, contact: Murray Rankin, University of Victoria, P.O. Box 2400, Victoria, B.C. V8W 3H7, (604) 721-8150

REVIEW OF THE CLEAN AIR ACT AND THE CLEAN WATER ACT

Presentation to the Review Panel on Environmental Law Enforcement in Alberta

John Lilley and Brian Free

Environment Council of Alberta

September 15, 1987

BACKGROUND

The Environment Council of Alberta is a crown corporation with a mandate defined by the Environment Council Act. Among other duties, this mandate requires the Council to conduct a continuing review of policies and programs pertaining to environment conservation, and to hold public hearings at the request of the Lieutenant Governor in Council. The Council may also investigate, at the request of the Minister of the Environment, any matter pertaining to environment conservation and make a report to the Minister.

During the Environment Council's public hearings on Hazardous Waste Management in Alberta (1980), about 55 percent of the presentors expressed concerns about the government's credibility in the environmental regulatory field. The presentors were both of the opinion that the present regulations were inadequate and convinced that environmental enforcement procedures were inadequate.[1]

These views were supported by the results of a survey conducted in 1980 for the Council.[2] This survey found that Alberta residents, generally speaking, felt that neither environmental regulations in the province nor their enforcement were tough enough. The majority of Albertans (67%) in 1980 believed that greater emphasis on environmental protection was needed, although this might have meant spending more money. These concerns and the comments received through the public hearings on hazardous waste management resulted in several recommendations which are related to your terms of reference. Discussion about them can be found on pages 162-164 and pages 185-186 of the ECA's Report and Recommendations on Hazardous Waste Management in Alberta.

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[1] Environment Council of Alberta. 1980. Public Hearings on Hazardous Waste Management in Alberta: Report and Recommendations. See page 157.

[2] MIR Information Research Ltd. 1981. Public Perceptions of the Environment in Alberta.

The findings of the MIR survey were supported by a review of six surveys published by the Environment Council in 1982[3]. The results of the six surveys were fairly consistent in that a moderate degree of dissatisfaction with government performance was expressed, but none of the surveys indicated a widespread attitude of directing all the blame for environmental problems toward government; indeed, the average citizen absorbs much of the abuse.

In the context of this background of public concern and interest in environmental protection, the Minister of the Environment asked the ECA to review the Clean Air and Clean Water Acts and their roles in the management of air and water quality in Alberta. The ECA's reports (each consisting of two parts, a staff review and the Report of the Environment Council to the Minister) were published in March, 1985. The following comments and suggestions arise primarily from the staff reviews of the Acts. Some additional comments relate to the Review Panel's Terms of Reference.

THE CLEAN AIR ACT

A GOAL FOR AIR QUALITY MANAGEMENT

For any management program, it is very important that a clear goal be in place. This principle applies to the management of our natural resources, in this case, air quality. A clear goal is important for the entire air quality management program, including enforcement, which is the main focus of the Review Panel. It should provide the basis for setting the ambient objectives that define the air quality Albertans desire. An overall goal also gives direction for the administrative judgements that are made when issuing licences, determining monitoring requirements, and deciding which enforcement measures should be used.

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[3] Kelly, M. 1982. Attitudes Toward The Environment: A comparison of Six Surveys Spanning Six Years.

The Minister of Environment has indicated that his department will strive to protect and improve the quality of our environment. Although this gives general direction for all Department programs, each program needs a more specific goal. Currently, there is no explicit goal for air quality management and this reduces the effectiveness of the Clean Air Act.

A goal for air quality management should reflect the needs and desires of all Albertans. Public input is important and will add credibility and support to the air quality management program. This goal may reflect a desire to protect the health of the general population and sensitive individuals as well. Albertans may also want to protect other aspects of our environment, such as animals, vegetation, or soils.

DEVELOPING A GOAL FOR AIR QUALITY MANAGEMENT SHOULD BE A PRIORITY.

AMBIENT OBJECTIVES

Based on the goal for air quality management, those air contaminants that require control and management can be determined. Objectives can be set for these contaminants in the ambient air according to available scientific studies and judgements about acceptability of risk, public acceptance of environmental degradation, and so on. Public input is desirable in setting ambient objectives because of these latter subjective judgements.

The Clean Air Act gives the Minister the authority to establish maximum permissible concentrations of air contaminants. This has been done in the Clean Air (Maximum Levels) Regulations for several contaminants. These concentration limits for the ambient air are unenforceable -- it is not an offense to exceed these levels. However, by placing them in a regulation and calling them "maximum permissible concentrations", an expectation is created in the public mind that some sort of punitive action is called for should they be exceeded. When no enforcement action is taken, the Department's reputation suffers. It may be more appropriate to call them objectives and publish them as official guidelines. This would not affect

their present use, but would better reflect their role in air quality management.

CONSIDERATION SHOULD BE GIVEN TO ESTABLISHING AMBIENT AIR QUALITY OBJECTIVES AS GUIDELINES AND NOT AS MAXIMUM PERMISSIBLE CONCENTRATIONS IN REGULATIONS.

PLUME DISPERSION MODEL

Facilities that are subject to licensing require a Permit to Construct. This permit requires that the facility be designed to meet the ambient objectives in the Clean Air (Maximum Levels) Regulations. A computer model, the plume dispersion model, is used to relate the emissions from the facility to the ground level concentrations. Factors such as local topography and wind patterns are considered. The height of the emissions stack is then designed to adequately disperse the contaminants and maintain acceptable ground level concentrations.

The reliance on plume dispersion to maintain air quality is based upon the Department's concept of the assimilative capacity of the environment. In our review of the Clean Air Act, we point out that the assimilative capacity of the atmosphere is very limited and diffusion is the primary mechanism for reducing the concentration of air contaminants. The magnitude of environmental effects is reduced, but the contaminants are more widely distributed. The long-term consequence of this approach is a uniform deterioration of environmental quality. Reliance on assimilative capacity for waste disposal brings into question the Department's policy of controlling pollution at its source.

THE FOCUS OF THE DEPARTMENT SHOULD BE ON PROTECTING THE ENVIRONMENT BY MINIMIZING THE RELEASE OF CONTAMINANTS FROM INDUSTRIAL FACILITIES RATHER THAN SIMPLY REGULATING THE UTILIZATION OF THE ENVIRONMENT'S "ASSIMILATIVE CAPACITY" FOR WASTE DISPOSAL.

EMISSION STANDARDS

Most emission standards are based on best practicable technology, although a few are based on best available technology. Government-industry task forces determine which technologies qualify and the emission limits that can be met with these technologies. A problem with technology-based standards is that there is no incentive to reduce pollution beyond the existing requirements. If the overall goal of the air quality management program is to protect or improve environmental quality, then some form of incentive to improve pollution control is desirable.

There are a variety of regulations and guidelines for air contaminant emissions, both federal and provincial. Under the provincial Clean Air Act, the Minister can establish industrial emission standards. In the Clean Air (Maximum Levels) Regulations, there are emission standards for visible emissions and particulates for all stationary sources (with exceptions). It is an offense to exceed these standards. As well, there are emission standards in this regulation for secondary lead smelters and polyvinyl and vinyl chloride plants. Emissions from these two industries are also subject to federal legislation and it is an offense under federal regulations to exceed these provincial standards.

The Department of Environment has also established emission guidelines for certain industrial facilities such as fertilizer plants, asphalt plants, and thermal power plants. These guidelines are not directly enforceable, but become enforceable if they are incorporated into operating licences.

Clarification of the types of emission limits that should be in regulations and those that should be in guidelines would be useful. For example, the regulations could be used for general prohibitions that apply to all sources, with guidelines reserved for specific industries or types of facilities. The guidelines would be incorporated into individual licences and made legally enforceable.

In Section 5 of the Clean Air (General) Regulations, there is a general prohibition of the unauthorized emission of toxic air contaminants. This could be a useful provision for legal action in the event of a single

episode of harmful emissions, provided that operating licences are written in a way that does not leave a loophole for licensed facilities.

LICENSING

The current system of permits and licences is generally good. However, the scope and nature of the licensed emissions need further consideration.

Normal Operating Level

Emission standards for normal operating conditions should be included in the operating licence, as is currently done. These emission levels would be based upon the technology determined to be most appropriate (e.g. best practicable or best available).

Allowable Variance

In order to accommodate normal variation in the operation of control technology, an allowable variance is appropriate. A facility would be permitted to exceed the normal operating levels with clear restrictions on the frequency, duration, or magnitude of these excursions. This allowable variance would not exempt start-ups, shut-downs, and malfunctions per se, but would be designed to accommodate the normal, acceptable regime for these occurrences. Exceeding the allowable variance would be a violation of a licence condition and subject to prosecution.

This allowable variance could be worded in several ways. For example, a certain number of excursions or a certain percentage of monitoring readings over the normal operating level could be acceptable. This concept of allowable variance is not entirely new to the Department's current system. It is found in the Clean Air (Maximum Levels) Regulations. In Section 10, subsection 2, visible emissions may exceed the normal standard in certain instances, but there is a restriction on the duration of the excursion. Similarly, in Section 12.2 concerning secondary lead smelters, excursions

over the standards for particulates and lead may be exceeded for a limited period of time.

Maximum Emission Limit

For each licensed contaminant there should be a maximum emission limit. This limit should be related to the goal of air quality management and should be set at a level above which concentrations are clearly unacceptable. This limit should be equal to or less than any general prohibition in the regulations to ensure that licensed facilities are still subject to that general emission standard. Excursions above this level would automatically be subject to strong enforcement action and absolute liability should apply.

OPERATING LICENCES SHOULD INCORPORATE THE CONCEPTS OF ALLOWABLE VARIANCE AND ABSOLUTE MAXIMUM EMISSION LIMITS.

Economic Incentives

Although not necessary for this proposed licensing strategy, it would be beneficial to incorporate some sort of incentives for improving pollution control beyond existing requirements. With emission standards based upon technology rather than environmental quality, there is no incentive to improve pollution control. Economic incentives could be incorporated into the licensing system to encourage improved performance. For example, excursions over the normal operation limits, although permitted with the restrictions described above, could be subject to emission charges, a reduction in tax credits, and so on. This type of encouragement would be justified in view of the Department's mandate to protect and improve the quality of the environment.

Certificates of Variance

Certificates of variance are used to alter permit or licence conditions or a provision in a regulation when certain conditions exist. This discretionary instrument provides needed flexibility to the regulatory system. Some

mechanism to accommodate unforeseen circumstances or acceptable, temporary deviations from licence conditions.

These certificates must not become letters of convenience for licensed facilities. This is achieved in part by having them issued by the Minister and not a government bureaucrat. They should be issued judiciously based upon clearly established criteria. Under the current Act, the Minister may issue these certificates if the anticipated contravention is beyond the control of the operator, the pollution will not threaten, life, health, or property, and refusal to grant a certificate would result in serious hardship for the operator without significant benefit to others. These criteria should be modified to include consideration for environmental quality and not just life, health, and property.

THE CRITERIA FOR ISSUING CERTIFICATES OF VARIANCE SHOULD BE MODIFIED TO EXPLICITLY INCLUDE CONSIDERATION OF ENVIRONMENTAL QUALITY.

MONITORING

It is appropriate that industry be required to submit monitoring information. Environmental monitoring should be a cost of their operation. Company monitoring data should be used for identifying problems and initiating administrative actions, such as issuing directives and control orders. The quality of the data is very important.

The government's quality assurance program is very important in establishing the credibility of company monitoring data. The Pollution Control Division has issued several Air Monitoring Directives outlining the detailed procedures that companies are expected to follow. A manual stack sampling code has been issued and a code for continuous monitoring was being developed when our review of the Clean Air Act was underway and is presumably completed. These monitoring procedures can be incorporated into operating licences and made enforceable. Other components of this quality assurance program include spot checks, witnessing annual stack sampling, checking the calibration of monitoring equipment, and so on. This program

may require considerable Department staff and budgetary resources, but it must be remembered that this is a lot cheaper than having the government do the monitoring. If the Department pays more attention to company monitoring, industry will respond with similar attention.

ASSURING THE QUALITY OF COMPANY MONITORING DATA SHOULD BE A PRIORITY OF THE POLLUTION CONTROL DIVISION.

ENFORCEMENT

The Clean Air Act provides several enforcement tools, including Directives, Emission Control Orders, and Stop Orders. These instruments are legally enforceable. Other offenses are identified in the legislation, including unauthorized emission of toxic air contaminants; exceeding certain emission standards; violating a condition of a permit, licence, or certificate of variance; failing to report an unauthorized release; and providing false information. The Department also uses written letters and meetings with the company staff as enforcement measures.

This array of measures should be adequate for the effective enforcement of the Clean Air Act. However, modifications are needed in the policies affecting enforcement decisions. The current enforcement policy favors negotiation over the more arbitrary methods provided in the Act and Regulations. This policy has attracted considerable public criticism. Because industry representatives are involved in selecting the appropriate control technology, setting emission standards, and negotiating licence conditions, a high rate of compliance should be expected and further negotiation at the enforcement stage is not warranted.

The administrative discretion associated with enforcement should be reduced. The incorporation of allowable variance in operating licences should reduce the need for administrative discretion. Excursions over the maximum emission limits would result in prosecution. However, some discretion will remain. For example, if emissions exceed the normal operating level more than allowed in an operating licence, a decision must be made whether to

prosecute or to issue a directive, emission control order, or stop order. A clear overall goal for air quality management would be an important guide. A set of criteria already exists that is used by Department officials to determine which measure is appropriate when a contravention is detected (see page 45 of our Review of the Clean Air Act). The list is long and gives an official many reasons to be lenient. These criteria should be reviewed and tightened up to reflect the new direction of the Department.

THE CURRENT ENFORCEMENT CRITERIA SHOULD BE MODIFIED TO REFLECT THE DEPARTMENT'S NEW EMPHASIS ON STRICTER ENFORCEMENT AND ITS MANDATE TO PROTECT AND IMPROVE THE QUALITY OF THE ENVIRONMENT.

THE CLEAN WATER ACT

THE NEED FOR ENVIRONMENTAL PROTECTION GOALS

As part of the review of the Clean Water Act and its role in the management of water quality in Alberta, it was necessary to understand not only the legislation and the regulations as they are written, but also the Department of Environment's interpretation of the legislation, and its policies and programs which guide the implementation of the Act.

The Department has published water resources management principles, surface water quality objectives, various guidelines and recommended standards, and other reports related to the implementation of the Clean Water Act and its provisions.

ONE OF THE MAIN FINDINGS OF THE CLEAN WATER ACT REVIEW WAS THAT THE "GOALS" OF THE DEPARTMENT OF THE ENVIRONMENT WITH RESPECT TO WATER QUALITY ARE NOT EXPLICITLY DEFINED.

The lack of explicit goals has led to different views within the Department about what these goals are. These differences are evident in different attitudes and approaches toward water quality management.

On one hand, there are Surface Water Quality Objectives which "apply to all surface waters in Alberta" and allow the most sensitive use, while on the other hand, basin-specific and reach-specific objectives are being developed based on the existing water quality and existing uses.

Calgary alone is required to have tertiary treatment to reduce phosphate loadings, even though total phosphorus levels downstream of Edmonton for 100 kilometers routinely exceed the province's water quality objectives. The water quality objectives being applied to the Beaver River basin in Northeastern Alberta are different from those applied anywhere else in the province. With these different water quality objectives, industrial and municipal growth, which otherwise might not have been feasible, may be accommodated.

What is the Department aiming to achieve through the Clean Water Act? What are the Province's goals for water quality management? These goals need to be clearly stated.

THE EFFECTIVENESS OF THE CLEAN WATER ACT COULD BE SUBSTANTIALLY ENHANCED BY THE ADDITION OF CLEARLY STATED GOALS FOR WATER QUALITY AND A STATEMENT OF POLICIES AND GUIDELINES TO PROVIDE DIRECTION FOR EFFORTS TOWARD THEM.

The public has a role to play in providing guidance with respect to the value judgements inherent in environmental protection. The water quality management goals should be a reflection of the desires of all Albertans. Public input during the development of these goals is essential. Consultation with other departments and agencies, such as the Energy Resources Conservation Board and Forestry, Lands and Wildlife, also will be necessary to ensure that the Department of Environment's goals and approach to water quality management are compatible with the responsibilities and interests of these agencies.

THE DEVELOPMENT OF WATER QUALITY MANAGEMENT GOALS SHOULD INCLUDE THE OPPORTUNITY FOR PUBLIC INPUT AS WELL AS COORDINATION WITH THE ENVIRONMENTAL PROTECTION ACTIVITIES OF OTHER DEPARTMENTS.

If Alberta's water quality management goals are explicitly stated and the supporting policies, implementation procedures, and anticipated results are clearly spelled out, then the implementation of the provisions of the Clean Water Act can be directed to attainment of those goals. An explicit statement of goals and policy would increase the awareness of the public and all water users of the Government's intentions in water quality management and provide a clear standard against which success in implementation and enforcement could be judged.

Regulations and licence conditions could be directed toward achieving the goals. Monitoring programs could be directed at evaluating the Department's success and identifying enforcement or regulatory requirements. Administrators and enforcement staff would have a clear context within which to undertake enforcement actions. Clear goals and policy would provide the necessary framework for decisions.

POLLUTION CONTROL ACTIVITIES WOULD HAVE MORE DIRECTION AND BE MORE EFFECTIVE IF THEY WERE LINKED WITH ACHIEVING STATED DEPARTMENTAL GOALS AND POLICIES WITH RESPECT TO WATER QUALITY MANAGEMENT.

THESE GOALS SHOULD INCLUDE A COMMITMENT TO MAINTAIN AT LEAST THE PRESENT QUALITY OF ALBERTA'S WATERS AND TO IMPROVE THE QUALITY OF THOSE WATERS THAT DO NOT MEET THE PROVINCE'S OBJECTIVES.

Goals such as these would be in keeping with the recognition by the Department that its mandate includes achieving the protection, improvement and wise use of our environment now and in the future.

MAINTAINING ENVIRONMENTAL QUALITY VERSUS LICENSING POLLUTION

There are two fundamental approaches to management of water quality: protecting the resource or licensing allowable contamination. The present Clean Water Act, except for the "general prohibition" clause, is aimed at authorizing and regulating the release of substances to the environment, rather than protecting environmental quality by preventing additional loadings of contaminants. This may appear to be a subtle difference, but it

has a major influence on the approach taken in the administration and enforcement of the Act. Water quality management is not approached with the philosophy of "what steps can be taken to maintain or improve the water quality?" but rather "will this extra contamination cause a noticeable deterioration in water quality?"

THE DEPARTMENT'S APPROACH TO WATER QUALITY MANAGEMENT IS BASED ON WHAT TECHNOLOGY CAN ACHIEVE, NOT ON WHAT IS NECESSARY TO PROTECT THE ENVIRONMENT.

Effluent guidelines and recommended standards were developed based on pollution control capability. Licence conditions are set based on a facility's or industry's processes and the level of emission control that is practical. Licence conditions are industry specific and related to the treatment technology.

Implicit or explicit allowance is made for the inability of technology to be perfect and departmental officials do not expect 100% compliance. There is allowance for uncontrolled releases, controlled but unlicensed releases, and accidental spills. There is also provision for Certificates of Variance. This approach to controlling releases does not take into account, at least explicitly, the environmental impacts of releases, nor does it engender in the staff an attitude that a violation of a regulation or licence condition is a serious matter.

The technological approach is also apparent in the development and application of effluent guidelines. These guidelines have not been updated recently and, for the most part, recognize mainly "traditional" water quality parameters. But times have changed. Industrial activities, processes, and technology have changed. Our understanding of the impacts of many contaminants has increased dramatically and, along with that developing knowledge, society's concerns and expectations have increased.

Based on these changes, new guidelines seem warranted. Development of new guidelines has apparently been avoided in part because of the feeling that the existing guidelines adequately protect water quality and that the

existing water quality has not indicated the need for more stringent requirements. The approach is not to take preventative action and protect or improve the present quality of the resource, but to allow further additions of contaminants until deteriorating quality warrants an improved response. This attitude has contributed to the public perception that environmental legislation is neither strong enough nor strongly enough enforced. The public expectation is that the Act should be protecting Alberta's water quality and that every violation is a serious offense and should be treated as such.

The "licensing pollution" approach to water quality management is also evident in the continued misuse of the concept of assimilative capacity. The concept of assimilative capacity has its basis in classical assumptions and theories with respect to the ability of aquatic systems to purify themselves of those contaminants, such as organic materials, that use dissolved oxygen in their decay. The contaminants are "assimilated" and at some point downstream, in distance or in time, the water body returns to its fully oxygenated state.

Unfortunately, the concept of assimilative capacity has spilled over into the management of a variety of contaminants, to the extent that Alberta's Water Resource Management Principles state that the assimilative capacity of receiver streams is "a natural resource that is legitimate to use."[4] However, some contaminants, such as metals, are not assimilated but accumulate in the aquatic ecosystem and may have adverse impacts. Controlling the release of these contaminants on the basis of technological capability alone means the eventual deterioration of the environment. A different approach is required, one based on maintenance or enhancement of environmental quality.

The assumption that a certain amount of contamination is acceptable is also reflected in water quality guidelines being developed by the Prairie

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[4]Alberta Environment. No date. Water Resource Management Principles for Alberta. See page 12.

Provinces Water Board. One option being considered is to define "assimilative capacity" as the difference between the natural water quality and an arbitrary maximum acceptable level for a particular contaminant. In this approach, assimilative capacity bears no relationship to the ability of the water body to purify itself, but is an arbitrary number -- an acceptable level of quality deterioration.

The long-term consequence of our present approach is to reduce all Alberta's water to a uniform level of lesser quality. Water should not be viewed as a resource that can be contaminated to some acceptable level. It should be viewed as a resource to be protected. Facilities should not be given a right to pollute, a licence to add further contamination. Instead, the Clean Water Act should be administered to control, reduce, or eliminate contamination of our water resources in order to maintain or improve the present quality.

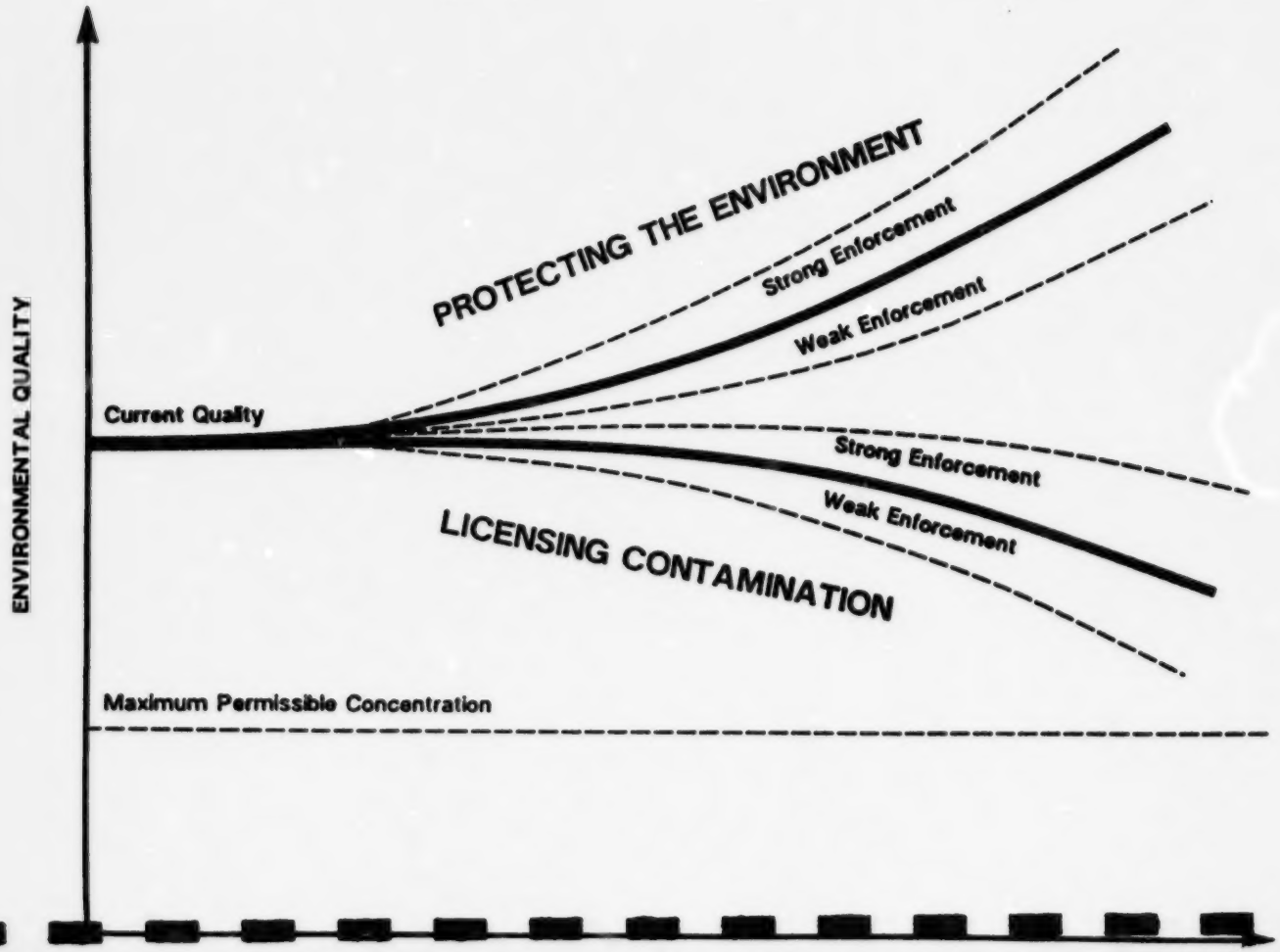
Approaches to environmental standard setting and the influence of enforcement actions are illustrated in Figure 1. In the figure, "maximum permissible concentration" is the ambient objective and indicates a concentration of a substance in the environment that society has set as the minimum level of quality, the point at which it is not prepared to tolerate further deterioration. Theoretically, at the time that an activity would lead to exceedance of this concentration, the activity would be halted. The goal in managing environmental quality should be to prevent such a situation from ever arising. Indeed, the long-term goal should be to improve environmental quality through a reduction in emissions. Usually this is done through setting effluent or emission standards.

Emission standards establish the rate at which contaminants enter the environment. Hence, a lenient standard will result in more rapid deterioration of the environment in the direction of the maximum permissible concentration. A strict standard could prevent environmental deterioration or result in an improvement in quality.

Enforcement of the standards, or the lack of the same, affects the performance of a standard in influencing environmental quality. Weak

Figure 1

Approaches to Setting Environmental Standards



enforcement of a standard means that the maximum permissible concentration is reached more rapidly than if the standard were strictly enforced.

Hence, emission standard setting and enforcement activities, to be most effective, must work together toward improving environmental quality. That is, they must work together to create and maintain positive slopes in the lines in Figure 1. Failure to maintain these positive slopes will result in a failure to protect or improve Alberta's environment.

AS A PREREQUISITE TO IMPROVED ENFORCEMENT, A CHANGE IN ATTITUDE TOWARD WATER QUALITY MANAGEMENT IS REQUIRED. IF THE MANAGEMENT OF WATER QUALITY WERE APPROACHED FROM THE POINT OF VIEW OF PROTECTING THE RESOURCE INSTEAD OF AUTHORIZING THE RELEASE OF CONTAMINANTS, THE ACT WOULD BE ADMINISTERED DIFFERENTLY AND ENFORCED VERY DIFFERENTLY. COMPLIANCE WOULD BE EXPECTED AND VIOLATIONS WOULD BE UNACCEPTABLE.

It is possible within the provisions of the Clean Water Act (and the Clean Air Act) to accommodate the changes that are necessary to implement a Departmental commitment to environmental protection. The following section discusses effluent standards and allowable variance as two possible tools to improve the effectiveness of the Act and to facilitate its enforcement.

EFFLUENT STANDARDS

The Clean Water Act authorizes the Minister to make regulations prescribing water contaminants and maximum permissible concentrations in effluent discharges (Section 2).

This is potentially an extremely powerful tool for protecting water quality, because the regulations can be made applicable to any substance(s), any source(s), and any location(s) and are directly enforceable under the Act. Effluent standards set by regulation might be used to place total bans on the release of some substances. Standards might be applicable to any source or specific sources. They could be based on the application of best available technology.

Because effluent standards would apply to any source, with the expectation that every facility would comply with them, they would have to be set at the least stringent level necessary to protect the resource and achieve Alberta's objectives for water quality. (Stricter limits could be applied in licence conditions.) Nevertheless, effluent standards issued under the Act would be enforceable whether a facility were licensed or unlicensed. They could be enforced independent of company monitoring through periodic or spot sampling using appropriate methods. However, no regulations have been made and this potentially powerful tool is going to waste.

REGULATIONS SHOULD BE PASSED SETTING EFFLUENT STANDARDS AT LEVELS THAT ARE CONSIDERED NECESSARY FOR THE PROTECTION OF THE PROVINCE'S WATER QUALITY. ONE HUNDRED PERCENT COMPLIANCE SHOULD BE EXPECTED AND ANY EXCURSION SHOULD BE TREATED AS A VIOLATION REQUIRING LEGAL ENFORCEMENT ACTION.

One area in which implementation of the Clean Water Act is more lenient is in the manner of its application to municipal effluents as compared with industrial effluents. Although Recommended Standards for Water Supply and Sewerage (1978), comparable to guidelines for industrial effluents, have been prepared by Alberta Environment, many of the "Recommended Standards" are not enforceable because the word "shall" is not used in the Standards document.

Unlike the industrial effluent guidelines, in most cases the Recommended Standards document is not incorporated into a municipal licence. Instead monitoring is required for specified substances, usually only BOD and non-filterable residues. For example, there are no guidelines nor licensed requirements for metals in sewage effluents. The assumption in licensing and monitoring municipal effluents is that if the BOD and non-filterable residues are within the limits, the effluent quality is adequate. "Exotic" chemicals in municipal sewage effluents are therefore only loosely controlled and the use of legal tools offered by the Clean Water Act would seem to be very difficult. The proposed effluent standards would apply to municipal effluents and would assist in controlling these sources.

Effluent standards provide a tool to control the effluent quality even if specific conditions were not attached to the licence. Effluent standards would help overcome another major gap -- the lack of effective controls over unlicensed sources, intentional releases, and one-time events. The use of effluent standards would shift the responsibility for controlling releases of unlicensed contaminants to the water facility.

LICENSING ALLOWABLE VARIANCE

The use of effluent standards will not negate the need for or the usefulness of terms and conditions specific to a facility's operating licence. Licences can be used to put in place effluent controls that are appropriate for the facility, the nature of its effluents, and, if desired, special conditions related to the facility's location and local environmental factors.

PLANT-SPECIFIC LICENCES WILL REMAIN AN INTEGRAL PART OF THE PROTECTION OF ENVIRONMENTAL QUALITY, BUT LICENCE CONDITIONS SHOULD REFLECT THE REALITY OF THE DEPARTMENT'S EXPECTATIONS FOR EMISSION CONTROL AND ITS INTENTION FOR ENFORCEMENT.

While it may be logical and, from a technological point of view, eminently practical to recognize that 100 percent compliance is not possible, and to include this as a consideration in enforcing the legislation, neither the terms and conditions of a licence nor the wording of the Act and its regulations acknowledge this. The result has been the creation of a credibility gap between Departmental actions and public perception about the enforcement of environmental standards.

The terms and conditions of a licence should anticipate both the expected variance in effluents under normal operating conditions and those effluents that are permissible in unusual circumstances.

ALLOWANCES SHOULD BE SPECIFIED IN THE LICENCE CONDITIONS FOR A VARIANCE AROUND PERMISSIBLE EFFLUENT LEVELS.

Allowable variances may include deviations from a numerical limit, or limits on the frequency of excursions, number of excursions, or length of excursion. The exact application of the concept will depend on the nature of the industry or the facility.

Licence conditions could be developed as they are now, based on an assessment of the technology with industry input. The main difference is that the licences would include normal operating conditions, acceptable variance during normal operating conditions, and absolute limits on releases during start up, shut down, repair, and maintenance. Because of industry input in developing licence conditions and the built-in accommodation for technological imperfections, the expectations for compliance should be 100 percent. Any violation of the licence conditions would automatically initiate enforcement action. For example, violations of the normal operating conditions might result in a directive requesting an explanation. Violation of the absolute limit would initiate prosecution.

THE CONCEPT OF LICENSED VARIANCE IS FORMAL RECOGNITION, IN ENFORCEABLE CONDITIONS, OF THE PRESENT APPROACH TO SETTING LICENCE CONDITIONS, RESPONDING TO EXCURSIONS, AND OBTAINING COMPLIANCE.

Including allowable variances within the licence conditions would remove some of the discretion in the application of enforcement procedures, and improve the credibility of enforcement procedures. The expectations of the Department would be clearly spelled out for both industry and the public. Everyone would know exactly what was expected. This is critical for the purpose of achieving credibility on all sides; expectations must match reality.

To accommodate in the licence condition the use of allowable variance to cover releases during repair and maintenance, provisions would have to be changed in Section 4 of the Clean Water Act, which exempts facilities from the need to obtain a permit, a licence, or an amendment to the existing licence during repair or maintenance. However, the operators of the water facilities should be required to notify the Department of their intent to undertake repairs or maintenance or other anticipated activities that might

result in a release approaching the absolute limit permitted by the licence. Prior notification would allow inspection and perhaps other actions by the Department, such as issuance of a directive or a control order. It would also facilitate prosecution activities, if such became necessary, by having an inspector on the spot to collect evidence. Provisions within the Act allow the Minister to issue a Certificate of Variance if a facility could not maintain effluents within the expected limits and if it was desirable to permit a variance.

The Clean Water Act (General) Regulations could also be more explicit in stating that reporting of a release as required by the Regulations does not eliminate the possibility of prosecution under Section 17 of the Act: the prohibition re the deposit of a water contaminant.

ADMINISTRATIVE VERSUS LEGAL ENFORCEMENT

The present "hierarchical" approach to the use of the various enforcement tools is based on the Department's use of a technological approach toward pollution control and knowledge of the limitations of technological capabilities. The underlying assumption is that an excursion is due to a flaw in design or a failure in technology. If the excursion happens once, then it likely will happen again. Therefore, changes in processes and equipment, as required by the cooperation, directives, control order, etc., will overcome these weaknesses and prevent a recurrence. This approach accepts that licensed conditions will be violated occasionally and is at odds with the public's expectation that licensed conditions should always be met. It is also an unsatisfactory tool for dealing with one-time events.

Because much of the strength of the Act depends on companies obtaining permits or licences, the failure to do so should immediately be subject to enforcement through initiation of prosecution or issuance of a stop order. (If the Department published periodic lists of companies that have been granted permits and licences, the public might be able to help through notifying the Department of companies that are suspected of not having a permit or a licence.) Public participation in the review of licences would

also help to make the public aware of changes in company operating conditions that, over the years, have reduced emission levels.

A basic concern arising from the review of the Clean Water Act was the degree to which the emphasis in the enforcement program has been placed on cooperation to achieve compliance. While the spirit of cooperation may be very appropriate when developing standards, guidelines, and licence conditions, it is not necessarily appropriate to the enforcement of the Act and its regulations once a facility has agreed to its operating conditions and its requirements regarding environmental protection. These two aspects require different approaches -- administrative versus legal.

Incorporating allowable variance as part of the licensed conditions and the developing clear-cut criteria for the implementation of directives, control orders, and prosecution would do much to separate administrative responses from legal ones. The development of guidelines, regulations, and licence conditions, as well as the enforcement response to excursions that fall within the range of allowable variance under normal operating conditions, should remain as administrative functions. Enforcement of effluent standards, requirements for reporting accidental or unlicensed releases, and compliance with other licence conditions should be the responsibility of a specific enforcement group.

To encourage accountability in undertaking the enforcement responsibility, the Act or its regulations should include provisions similar to those in Section 63 of the Fisheries Act (Canada), which make it an offense for an inspector or any administrator of the Act to aid or abet in the violation of the Act or its regulations.

PUBLIC INVOLVEMENT

THE PUBLIC HAS A VALUABLE ROLE TO PLAY IN GUIDING WATER QUALITY MANAGERS AND GOVERNMENT WITH RESPECT TO THE VALUE JUDGEMENTS INHERENT IN ENVIRONMENTAL PROTECTION. THE PUBLIC SHOULD ASSIST IN THE DEVELOPMENT OF WATER QUALITY GOALS AND PROVINCIAL OBJECTIVES FOR WATER QUALITY AND BE INVOLVED IN THE PROCESS OF SETTING EFFLUENT STANDARDS.

Technical expertise in pollution control is no guide to a balance between resource development and environmental protection nor to value judgements concerning desirable goals for water quality management. Such judgements require policy based on a broad range of points of view.

The Department should draw more on the interest and concern of the public to give it the support in rigorously protecting environmental quality. An initial step is to make the public, as well as industrial and municipal interests, more aware of the environmental protection activities of the Department. Improved communication with the public should lead to improved credibility for the Department.

THE DEPARTMENT SHOULD IMPROVE THE PUBLIC'S AWARENESS OF, INTEREST IN, INVOLVEMENT WITH, AND SUPPORT FOR ITS WATER MANAGEMENT ACTIVITIES BY PERIODICALLY PUBLISHING SUMMARIES OF INDUSTRIAL AND MUNICIPAL EFFLUENT RELEASES AND RATES OF COMPLIANCE, AND UPDATES ON ACTIONS TAKEN IN RESPONSE TO CONTROL ORDERS AND DIRECTIVES.

The public can also assist the Department through watching and reporting matters of environmental concern. Most water quality control orders issued for industrial activities were the result of either public vigilance or Departmental inspections. Few control orders result from the department's review of routinely submitted monitoring data. (This could change with the incorporation of allowable variance into the licence conditions.)

THE PUBLIC SHOULD BE ACTIVELY ENCOURAGED TO NOTE AND REPORT ANY BEHAVIOR WHICH SEEMS CONTRARY TO THE EXPECTATIONS OF ENVIRONMENTAL PROTECTION.

The promulgation of effluent regulations and a public awareness campaign to inform the public of what constitutes unacceptable behavior would assist in making this program effective. (The Pollution Sub-Committee of the Public Advisory Committees to the Environment Council, in recent correspondence with the Minister, suggested an Environment Watch program, which encompasses these ideas.)

THE DEPARTMENT SHOULD ASSESS ITS FACILITY INSPECTION PROGRAM AND ITS PROGRAM FOR REVIEWING COMPANY REPORTS WITH THE AIM OF DETERMINING WHICH ASPECTS ARE THE MOST EFFECTIVE IN UNCOVERING EXCURSIONS AND LEADING TO IMPROVEMENTS IN WATER QUALITY MANAGEMENT.

This assessment should consider both industrial and municipal reporting.

A company or municipality could be held more publicly accountable for its behavior at the time it applies for renewal of its licence. The licence review procedures should include a formal opportunity for the public to express its concerns about the water facility's past operating record and the need for changes in operating conditions. The enhanced public awareness and involvement program suggested above would help make the public's participation in this review more meaningful.

SUMMARY

The Clean Air and Clean Water Acts have played an important role in protecting air and water quality in Alberta through their primary focus of licensing and regulating the release of contaminants by the application of best practicable or best available pollution control technology. This approach was suitable for bringing order and control to existing industries and municipalities and other pollution sources. Continuing use of this approach to protect our environment, however, will result in gradual deterioration in air and water quality. A different approach is needed to maintain the present level of environmental quality or provide the tools for its improvement.

The Clean Air and Clean Water Acts and their systems of licensing releases have the potential to be more effective. What is required is some solid base, some explicit long-term goal, that provides a continuing reminder to everyone involved in the process of why the work is being undertaken and where we, as Albertans, are heading with respect to the quality of Alberta's air and water. All Albertans should be invited to participate in developing these goals. Public involvement is important because these goals will

represent the aspirations of Albertans for the quality of their environment. They are subjective decisions and a broad range of points of view should be sought.

The development of goals should be accompanied by a change in attitude away from "regulating the release of contaminants" toward "protecting the environment by minimizing pollution." This attitudinal shift can be accommodated with only minor changes to the Acts themselves. The major change required is in the policies governing the administration of these Acts.

Provisions within the Clean Air and Clean Water Acts for emission or effluent discharge regulations should be used to establish absolute limits on emissions for all sources. The terms and conditions attached to operating licences should reflect the concept of allowable variance to spell out explicitly the emissions permitted under a variety of operating conditions. The application of this concept may differ between the two Acts because of the differences in the nature of air and water resources and the facilities that produce and control air and water emissions.

If the Department's expectations for pollution control are clearly spelled out in emission standards and through the terms and conditions of facility licences, then excursions from these standards and licence conditions should be considered unacceptable. Immediate, strong enforcement action should be taken. If the various administrative aspects of environmental quality management were approached with this attitude, the enforcement of the Acts would be much more straightforward. Successful enforcement depends on expectations for compliance being clearly indicated and fairly enforced on licensed facilities.

Departmental credibility in environmental management also depends on the Department clearly expressing its intentions and then fulfilling them. The separation of administrative aspects of environmental management from the legal aspects is important to achieving this credibility. The establishment of an Environmental Enforcement Division is an important step along the way. Designated enforcement staff, trained and competent in law enforcement and

with the legal responsibility to enforce the environmental legislation, would make enforcement more effective.

The Department should take other steps to gain public recognition and support for its environmental protection activities. For example, summaries of monitoring data and compliance reports, and updates on actions taken in response to control orders and directives, should be published periodically. Public involvement in observing and reporting environmental offenses should be encouraged and public comment should be sought when operating licences are considered for renewal.

REVIEW PANEL

PRESENTATION

BY THE

PULP INDUSTRY

AGENDA: a) Opening Comments/Objective

b) Review of Current System

c) What is the issue:
- Enforcement
- Alberta Environment Structure
- Shutdown/Startups

d) Closing Remarks

OBJECTIVE:

Provide Pulp Industries perspective on the issues under review by the Panel.

CURRENT SYSTEM

(Key Points)

1. Alberta Environment limits are some of the toughest in Canada.

2. The current system has achieved excellent results with an average of 98% compliance.

3. Current System focuses on protecting the environment.

4. Consultation between Alberta Environment and Industry allows resources to focus on improvement/enhancements.

5. Chronic non compliance is addressed by Alberta Environment.

6. Hierarchy of enforcement allows Alberta Environment flexibility in it's response to non compliance.

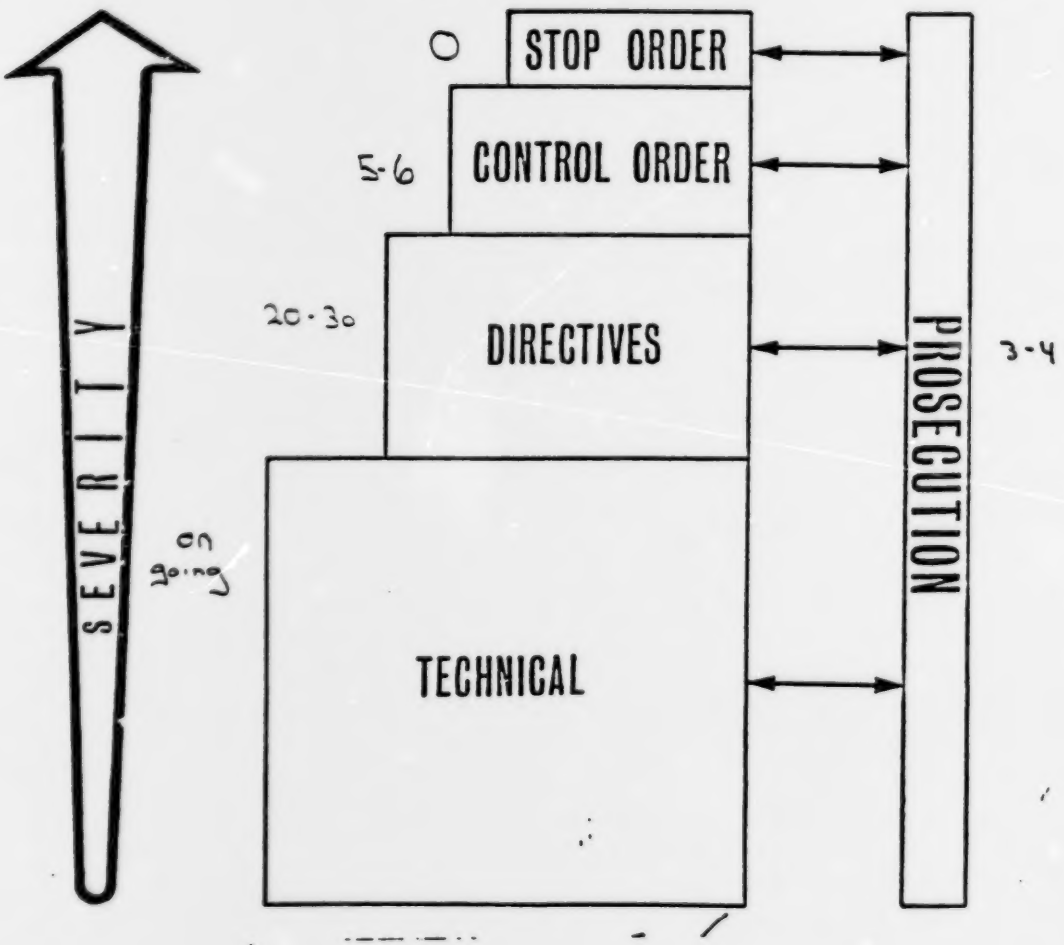
7. The public does not understad the Environmental Control System in the province. Alberta Environment must educate the public on the system and it's success.

8. We must look for ways to enhance the new system.

Current System

ENFORCEMENT HIERARCHY

~2200 licensed
~98% compliance



ENFORCEMENT

(Key Points)

1. The current system very effective 98% compliance.

2. Majority of Companies are gote citizens and act responsibly towards the environment.

3. While we fully support enforcement of environmental laws we must recognize prosecution in reactive versus proactive. Resources forcussed on prosecution are working the problem rather than the solution.

4. A licence excursion should not be grounds for prosecution. This is not the intent of licence limits as they are currently written.

5. Prosecution should be applied where a Company's negligence results in a significant environmental impact.

6. The application of CAER or a similar program is a proactive approach to environmental management.

7. "Never to be exceeded limits" are unmanageable as they are difficult to set and difficult to monitor.

8. Keep the focus on improvement of environmental quality.

ALBERTA ENVIRONMENT
STRUCTORE

(ENFORCEMENT DIVISION)

(Key Points)

1. An enforcement division exists at this time - Pollution Control manages the current enforcement hierarchy.

2. Pollution Control has been effective in achieving high environmental standards in the Province.

3. Through communication Pollution Control and Industry have focused on improving environmental control.

4. We feel Mr. Kowalski's need for an enforcement division can be met through enhancements to Pollution Control. Build on the successes.

5. If an enforcement division is created we feel the enforcement hierarchy should be managed as follows:

Pollution Control	Enforcement Division
- technical	- prosecution
- directives	
- control orders	
- stop orders	

STARTUP/SHUTDOWNS

(Key Points)

1. Some Industries are not capable of meeting normal environmental limits during startup/shutdown. Normal operative limits are meant for normal operating conditions.

2. Industries should negotiate startup and shutdown limits point by point. These must be based on technical capabilities and protection of the environment.

3. Startup/Shutdown limits must be set such that human health and the environment is protected.

4. The number/frequency of startups and shutdowns must be based on technical capabilities and will be influenced by economics.

5. No blanket waivers should exist for startups and shutdowns.

6. If special environmental limits are required to commission a new Plant then a startup schedule should be worked with Alberta Environment.

7. It is not practival or economical for Alberta Environment to gain the expertise to allow them to determine how a Plant should startup or shutdown.

CLOSING COMMENTS

1. Current system is good and the results support this. We need to look for opportunities to enhance it.

2. One incident by itself should not result in wholesale change.

3. The Hierarchy of enforcement provides Alberta Environment needed flexibility.

4. Pollution Control is an Enforcement Division and we should enhance this system rather than building a new one.

5. Companies who through their negligence significantly impact the environment should be prosecuted.

6. Enforcement is reactive rather than proactive.

7. CAER or a similar program should be adopted as a means of proactively protecting the environment.

8. Some industries need startup and shutdown limits which should be negotiated point by point. Blanket waivers should be eliminated.

9. Alberta Environment needs to share it's success with the public.

Enforcement

Comments

Incident: as defined under part II section 12(1) clean air act

Report: as required by part 2 section 12(1) "with in 24 hours" of the clean air act

Significant: As proposed by CEPA

Follow-up letter: as required by part 2 section 12(2) "with 72 hours" of the clean air air.

current regulator enforcement: technical bureau directive control order etc

Company mets with A.E. - after any significant incident a mandatory meeting to review incident

corrective action: given incident did the company follow the proper procedure (notification)

CAER - risk assessments will be incorporated into licence

Favourable: based on previous industry experience

Incident

Report to A.E.

- current system 98% compliance cooperation approach by A.E. has had excellent results

was this a significant environmental incident

N → follow-up letter to A.E. → currently regulatory / Enforcement System followed → end of incident

Y

Company meets with A.E. to review incident

was appropriate action taken (CAER)

Y

N

was incident favourable

Y → prosecution → identify and incorporate changes as required → end of process

N

Current regulatory enforcement route is followed

Identify and incorporate changes as required

end of incident

PRESENTATION TO THE REVIEW PANEL ON

ENVIRONMENTAL LAW ENFORCEMENT

October 13, 1987

General

The Minister of Environment has ordered a thorough review of Alberta Environment's licensing, standard setting, monitoring and enforcement procedures and environmental protection legislation." I fully agree that a review is necessary. However, such a review takes time and must involve the public.

The Environment Council of Alberta was established to carry out reviews such as this. They have the mandate, the structure and the format to carry out an effective review of Alberta's environmental legislation, standards and enforcement policies and practices. The E.C.A. is required by legislation to investigate any matter pertaining to environment conservation upon request of the Minister.

The role of the Department of the Environment is "to promote a balance between resource management, environmental protection and the quality of life." This dual mandate results in a conflict of interest within the Department of the Environment. The Department is somehow supposed to balance resource management and environmental protection. This balancing should be done between departments by elected people, not by bureaucrats within the Department of Environment. We have departments responsible for resource management and for economic development. We need a department whose only mandate is to protect the environment.

According to the Department's Role and Mission Document, the Mission of the Department of the Environment is "to be an environmental advocate, to promote and practice an environmental ethic and to promote environmentally responsible actions by groups and individuals." That sounds great!

Yet in 1984 at a conference on Environmental Mitigation, Ken Smith, the Assistant Deputy Minister to the Environment, stated quite emphatically that the Department of the Environment is not an environmental advocate.

The Minister recently labeled environmentalists as "social anarchists."

Obviously, something is seriously wrong. There needs to be a thorough review of the mandate, roles and responsibilities and performance of the Department of the Environment.

The Minister is required under the Department of The Environment Act (Sec. ~~6(1)~~ 7(1)(a)) to prepare from time to time a long range plan for government consideration in matters pertaining to the environment which may include a statement of objectives, major factors affecting the environment in relation to stated goals and action to be taken to achieve stated goals. I look foward to receiving a copy of the Minister's long range plan.

Legislation and Standards

Unfortunately, I have not had sufficient time to do a thorough review of the environmental protection legislation and standards in Alberta.

The Environment Council of Alberta completed a review of the effectiveness of the Clean Air and Clean Water Acts in 1985. The Government should review and respond in detail to the ECA's recommendations.

I agree with most of the ECA's recommendations. The one exception is that I believe the public should be involved in establishing emission standards. I believe the public (or "special interest group") input was extremely valuable for the review of sulphur recovery requirements.

According to a letter from the Minister dated August 7, 1987, the Department has been considering the establishment of reach-specific water quality objectives for major rivers in the province. He indicates that the Department is considering using such objectives for the Athabasca River Basin and that the pullic will be fully involved in the river basin planning process. However, he does not indicate that the public will be consulted on the concept of utilizing reach specific water quality objectives either for that river basin or for the province as a whole. The implications of such a change are major and should only be considered after a thorough review involving the public.

Ambient air standards exist for only seven parameters in Alberta: sulphur dioxide, hydrogen sulphide, nitrogen dioxide, carbon monoxide, oxidants, suspended particulates, and total dustfall. Serious consideration needs to be given to establishing ambient standards for more compounds such as hydrocarbons and other organic compounds, other sulphur compounds including mercaptans, sulphur trioxide and carbon disulphide, and for heavy metals. Under the existing standards, Western Co-operative Fertilizers could not have

been prosecuted for exceeding ambient standards for sulphur trioxide because no such standards exist.

Many of the air pollution problems in Alberta are caused by fugitive emissions and not by licensed emissions from the stack. More emphasis should be put on the identification and control of fugitive emissions.

Licensing

Section 4 of the license issued under the Clean Air Act to Western Co-operative Fertilizers states:

"Subject to Section 4.1, the plant units shall be started up, operated and shut down such that:

(a) the emission of the air contaminants set out...do not exceed the... limits..."

That part is fine. However, section 4.1 appears to negate section 4(a) as it applies to start-up:

"The limits specified...for the nitric acid unit...and the sulphuric acid units do not apply during start-up periods if all reasonable steps are taken to minimize contaminant emissions."

Both Syncrudes's and Suncor's licenses state, "Except when due to factors beyond the control of the licensee..." and the amounts and sources of compounds which can be emitted are listed. What does "except when due to factors beyond the control of the licensee" mean? Does this mean they can exceed their emission levels during plant start-up?

Both Syncrude and Suncor are required to advise the Director of Pollution Control of all planned turnarounds no later than two weeks prior to the date of their commencement. No such requirement exists for Western Co-operative Fertilizers.

The licenses for the Ram River and Strachan Sour Gas Plants state, "The plant shall be operated such that for the sulphur recovery process unit incinerator stack" and the maximum levels that each company is allowed to emit is listed. No mention is made of exceeding those limits during plant start-up or when factors are beyond the control of the licensee.

There is no need to have such provisions because plants seldom operate at full capacity and certainly don't need to during plant start-up so even if they do not operate at optimum efficiency during start-up, there is no reason for them to exceed their maximum emission limits. Furthermore, if the Department decides to prosecute, it will be up to the courts to decide if there were factors beyond the control of the licensee.

All licenses issued under the Clean Air Act of Alberta which contain a provision for license limits to be suspended during plant start-up or contain the clause "except when due to factors beyond the control of the licensee" should be ammended to eliminate that provision and/or clause.

On January 15, 1982, the Hon. Jack Cookson, Minister of the Environment, met with the Co-ordinating Committee of the Public Advisory Committee on the Environment with respect to revisions to the Clean Air Act. He invited comments on the possiblity of licensing so that plants will have to reduce their throughput on the basis of meterological conditions. Consideration should be given to this suggestion. In any event, a company should not be allowed to exceed ambient air standards regardless of the meterological conditions.

Monitoring

It is misleading for the government to say that there is 98 or 99% compliance with ambient air standards by Alberta industries based on our current monitoring system. Approximately 40 continuous monitoring stations would be required around a single point source to pick up 90% of the exceedances. Some plants aren't required to have even one continuous monitoring station operating for the entire year. To my knowledge, the highest number of monitoring stations around a single point source is five. So considerable less than 90% of exceedances are detected.

Currently, industry is responsible for monitoring itself. This results in public distrust of the monitoring program. It also results in inefficiencies and duplication.

Consideration should be given to establishing an independent monitoring agency. The board of directors of this agency would include public members and would not have as members anyone with a vested interest.

To cover the costs of the agency, industries would be assessed a fee comparible to what they are now spending on monitoring. A province wide network of monitoring stations could be established based on monitoring information and past experience. The few industry representatives I have discussed this with have responded positively and would not object to being freed from the burden of monitoring.

In the Netherlands, west of Amsterdam, an environmental group has organized its own sniffing network. Participants' phone numbers are listed and whenever people smell something they phone their neighbor downwind and they make a second call to the province. Within a short time the network will have located the size and direction of the cloud. The network functions 24 hours a day making sure that industries don't dump air pollutants during the night. The authorities also react 24 hours a day. Public sniffing networks could be established in Alberta to work in conjunction with the existing complaints line especially in problem areas. Of course to be effective the department must be prepared to act when complaints are reported and to communicate to the networks the nature and results of their actions. This sniffing network would work in well with the Environment Watch Program the Minister is presently considering.

Enforcement

I would like to support the Minister's decision to create a new Environmental Enforcement Division. Hopefully, the new Division will include a lawyer who is interested and experienced in environmental law.

Using information provided by Alberta Environment, I have summarized the number and magnitude of H2S and SO2 contraventions for Suncor and Syncrude from 1983 through 1988.

see Table 1

While there has been improvement in some areas, most notably the number of hours of H2S contrraventions by Syncrude (and in the level of particulates emitted by Syncrude - I didn't include this information in the summary because of inconsistencies in the way it was reported), there has been little improvements in other areas.

I question whether the current level of compliance by Suncor and Syncrude is satisfactory. Does the department condone this level of pollution? How many contraventions of what magnitude are necessary before the department recommends prosecution?

The summaries from July 1984 through December 1986 do not take into account readings for which the companies have requested a disclaimer on the grounds that their plant was not the source of the reading. What is the department's policy regarding disclaimers? Are they automatically accepted? Does the company have to provide any reasons with their request to disclaim? How many contraventions were disclaimed by each company? If the company monitoring the contravention was not the source of the contravention, who was? Are the contraventions which are disclaimed by one company added to the source companies list of contraventions?

These are all matters which need to be dealt with in an enforcement policy similar to the policy which Environment Canada is working on. Such a policy should be drafted and subjected to public consultation. The policy should make it clear under what circumstances prosecution will be initiated and when other enforcement mechanisms will be utilized.

These are just some of the questions which need to be addressed in an enforcement policy:

- What level of emissions over the license to operate is necessary for prosecution to occur?
- How frequently and for what duration must an emission be in excess of licensed limits for prosecution to be initiated?
- How is the degree to which the emission was of health or environmental significance assessed? What methods are used to determine if there was any environmental damage?
- What is the specific policy of the department regarding past performance and operating efficiency?

In 1984, an interdepartmental committee was reviewing the Government's approach to enforcement under the Fisheries Act and Environment Acts. What is the status of that committee? Have they made any recommendations and, if so, what are they?

For several reasons, the Department needs to put more emphasis on prosecution.

Negotiation, which the Department favors, will only be effective if the threat of prosecution is real.

The existing system is unfair. Individuals who break the law are prosecuted but large companies can repeatedly break the law for many years and go unprosecuted.

Companies who obey the law receive unfair competition from companies who do not install proper equipment or employ qualified people. In addition, the public tends to blame industry in general for pollution problems, not just the companies that are at fault.

Recommendations

In summary, I would like to make the following recommendations:

1. The Minister of the Environment should request the Environment Council of Alberta to carry out a thorough review of Alberta's environmental licensing, standard setting, monitoring, enforcement policy and procedures, legislation and the mandate, roles and responsibilities of the Department of the Environment.

2. The Minister should, if he has not already done so, prepare and make public a long range plan including a statement of objectives, major factors affecting the environment in relation to stated goals and action to be taken to achieve the stated goals.
3. The Government should review and respond in detail to the Environment Council's recommendation on the effectiveness of the Clean Air and Clean Water Acts.
4. There should be a thourough review including public consultation of the implications and consequences of changing from the concept of province wide water quality objectives to reach-specific water quality objectives.
5. Serious consideration should be given to establishing Ambient Air Standards for more parameters. The public should be involved in this review.
6. There should be more emphasis on the identification and control of fugitive emissions.
7. All licenses issued under the Clean Air Act of Alberta should be reviewed for the purpose of eliminating any provision for exceeding emission limits during plant start-up or due to factors beyond the control of the licensee.
8. The implications of establishing an independent monitoring agency should be investigated.
9. The public should be encouraged to establish sniffing networks to assist the existing complaints line.
10. I support the creation of an Environmental Enforcement Division which includes an environmental lawyer.
11. An Environmental Enforcement Policy should be developed with public input.

12. The Department of the Environment should put more emphasis on prosecution.

Table 1

	# of Hours of H_2S Contraventions	Peak H_2S average hourly concentration[1] (ppb)	# of Hours of SO_2 Contraventions	Peak SO_2 average hourly concentration[2] (ppm)
Syncrude				
1983	685	121	20	0.323
1984	1142	200	20	0.618
1985	123	114	20	0.574
1986	58	42	11	0.256
Suncor				
1983	618	137	61	0.440
1984	171	126	67	0.660
1985	251	52	45	0.370
1986	149	100	76	0.420

1 Regulation for maximum 1 hour average for H_2S = 10 ppb

2 Regulation for maximum 1 hour average for SO_2 = 0.17 ppm

STRATHCONA INDUSTRIAL ASSOCIATION

SUBMISSION
to
ENFORCEMENT REVIEW PANEL
by
STRATHCONA INDUSTRIAL ASSOCIATION

The Strathcona Industrial Association is pleased to have the opportunity of making this submission to the Enforcement Review Panel on matters relating to the protection of the environment and to regulation enforcement.

It is understood that the scope of the Enforcement Review Panel is very broad, and that it has the overall objective of presenting an Action Plan to the Minister of Environment at the end of October 1987, in regard to improving the enforceability of present regulations.

General concepts and principles are presented in this submission, rather than details of methodologies or techniques.

The Strathcona Industrial Association comprises nine industrial members operating in east Edmonton and the County of Strathcona. The Association has been in operation since 1973. Further details are presented in the attached brochure, "Update 1986."

The Association presents the following viewpoints:

A. The principal objective for both industry and government should be to protect the environment.

   The most effective way of accomplishing this goal is to use a pro-active approach with the development of reasonable and effective regulations by the Government in consultation with industry. A recent example of this pro-active approach is the major revisions made to the hazardous waste regulation. The Strathcona Industrial Association provided input through the Hazardous Chemicals Act Advisory Committee.

B. The present system of enforcement should be retained with minor modifications to deal with issues such as those arising out of the incident in Calgary earlier this year. It is understood that the present system of enforcement results in a very high degree of compliance (at least 98%).

C. Industry has the responsibility for establishing and maintaining effective processes and operating procedures for the protection of the environment.

D. The development of effective regulations and their enforcement require industry's cooperation. A recent example of cooperation was the development of the Association's Air Monitoring Network on a voluntary basis. This was to ensure the environment would be protected subsequent to proposed expansions. This network was converted to a compliance network which Alberta Environment can access through a direct "real time" computer link. Another example of cooperation was the provision of air quality data from the Association's network to government during the sour gas well blowout at Lodgepole, Alberta.

E. Cooperation between government and industry is needed to provide effective environmental protection. Industry can then focus on its operations and environmental protection measures rather than legalistic aspects of compliance with regulations.

The Strathcona Industrial Association makes a number of suggestions for consideration by the Enforcement Review Panel:

A. The use of the present enforcement system should be continued with only minor modifications.

B. Include Community Awareness and Emergency Response (C.A.E.R.) - type requirements in Permits to Construct and/or Licenses to Operate. This approach would require accountability by the operator.

The Enforcement Task Force, of which the Strathcona Industrial Association was a member, developed the concept of "three duties" that would be required of the operator prior to the issue of a new license or prior to the renewal of an existing license. These are as follows:

1. Identify operating conditions that could result in emissions that could acutely impact health, safety, and the environment.

2. Have an emergency plan in place that includes informing neighbouring communities (including government).

3. Follow predetermined procedures in place to minimize the emissions.

These Duties are very similar to the principles of CAER (Community Awareness and Emergency Response) that the Strathcona Industrial Association adopted early in 1987, which are:

1. Know community concerns and respond sensitively to them.

2. Know the laws concerning right-to-know and community emergency response, and observe them in letter and in spirit.

3. Ensure that operations do not present an unacceptable level of risk to employees, the public or the environment.

4. Give relevant information on the hazards of chemicals to customers and transporters, and make it available to the public.

The Strathcona Industrial Association also agreed formally to the following course of action:

> **All members of SIA will carry out a hazard identification for their site, and, where required, will develop a site emergency action plan that deals with hazards which could have an impact offsite.**

Association members agree that the Strathcona Mutual Aid Program is the preferred vehicle for emergency response and members are working closely with this group.

The Association has a Steering Committee that is coordinating developments in fulfillment of the principles of CAER. A Working Committee is responsible for hazard inventory, risk assessment, and dispersion modeling appropriate for tracking pollution clouds.

C. Use the pro-active approach rather than more enforcement for better environmental protection.

It is recognized that voluntary compliance is an effective method for environmental protection, and is probably also cost effective. The Association supports cooperation with the regulatory authority and government/industry dialogue. Adverserial situations should be avoided and the focus should be on environmental protection, rather than legalistic aspects of meeting regulations.

D. Establish a multi-disciplinary task force to develop recommendations on the enforcement process. The Association would be willing to participate in it.

This consultative process has been very effective in the case of the Hazardous Chemicals Act Advisory Committee, and in the two meetings the Enforcement Task Force held. It is consistent with the recommendation of the National Task Force on the Environment and Economy for the development of Provincial "round tables" that was strongly endorsed by the Minister of Environment.

It is presumed that operation of such a task force would be "fast track" to meet the Minister's requirements. The Association would be able to contribute within that time frame.

The Strathcona Industrial Association looks forward to further communication and dialogue wth the Government on environmantal matters relating to the Action Plan to be developed by the Enforcement Review Panel.

STRATHCONA INDUSTRIAL ASSOCIATION

R. A. Wood, President

STRATHCONA INDUSTRIAL ASSOCIATION

ALCAN

CELANESE

C-I-L

ESSO Strathcona Refinery

FIBERGLAS CANADA INC

INTERPROVINCIAL LIMITED

PETRO-CANADA

stelco

TURBO

UPDATE 1986

EMERGENCY RESPONSE

The Association's air monitoring stations may be useful in an emergency situation. The Association is aware how local agencies operate, and discussions have been held with these to determine how the air monitoring stations might be useful to them in the event of an emergency.

One area that could benefit is the rapid access to wind speed and direction information. Member companies also have technology that could be used to determine chemical emissions in the event of an emergency.

The air monitoring instruments used in the Network are designed to measure pollutants at very low levels. If an incident occurred where the levels of specific gases, such as hydrogen sulfide, reached dangerous levels, the instruments could be used by the installation of a dilution device in conjunction with the existing computer surveillance and logging facilities.

As an example, information from the Network was provided during the Lodgepole sour gas well blow-out incident.

Oil Spill exercise on the North Saskatchewan River at Edmonton

A view of the City of Edmonton from "Refinery Row". The "Elmjay" air monitoring station (located close to Texaco) is in the foreground.

INFORMATION EXCHANGE

Examples of recent meetings are: Alberta Environment, Canadian Chemical Producers' Association, City of Edmonton, Edmonton Disaster Services, Fort Saskatchewan Regional Industrial Association, Mutual Aid and the Petroleum Association for Conservation of the Canadian Environment. Information exchange benefits all parties, the public, government and industry.

One of the functions of the SIA is to meet with government agencies and other associations to discuss and exchange information on items of mutual interest, in order that they can be addressed effectively and any concerns resolved.

The Technical Committee of the Strathcona Industrial Association setting up for information exchange

REGIONAL LAND USE PLANNING

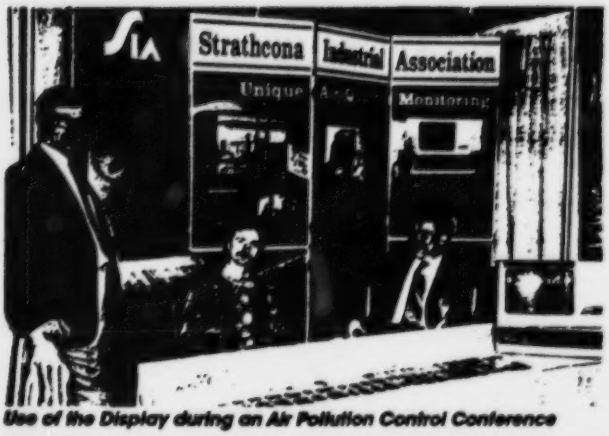
The Strathcona Industrial Association has provided input to the Development of the Edmonton Metropolitan Regional Planning Commission (EMRPC) Regional Plan and to the Strathcona County General Plan. The Association endorses the concepts in the Regional Plan regarding heavy industrial development, and the co-existence of industrial development and urban development with adequate buffer zones separating the two types of development.

The Association has always emphasized the need for adequate separation between existing industrial development and incompatible developments such as residential development, with an absolute minimum separation of 3.0 km.

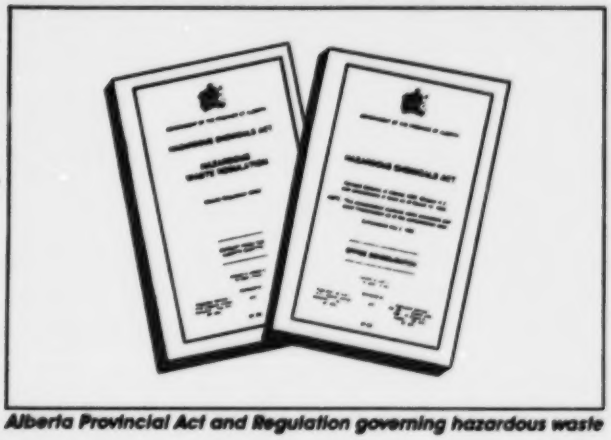
FINANCIAL INFORMATION

The Association operates as a non-profit association and its funding from members is used exclusively for the activities of the Association. Budgets are established on an annual basis and are strictly controlled.

All operations and activities of the Association are completely funded by the members. A major capital outlay was the development and construction of the Air Monitoring Network in 1979 ($500,000) with significant capital outlays since that date. The annual operating budget is typically around $300,000.



Use of the Display during an Air Pollution Control Conference



Alberta Provincial Act and Regulation governing hazardous waste

PUBLIC RELATIONS

Urban growth around the Strathcona Industrial Area has encouraged employees to locate closer to their work place and has created a very stable social and economic structure. While enjoying the benefits of this urban-industrial development, governments and the public express concerns about the effect on the environment.

With the implementation of the Air Monitoring Network, accurate data describing the quality of air became available. Although this information is shared with Alberta Environment, the Association believes the information should also be shared with its residential neighbors. Accordingly, a display booth was developed that described the operation of the Air Monitoring Network and included a computer terminal capable of accessing the air quality data base. The display has been shown in a variety of public locations including the Sherwood Park Trade Fair, Strathcona Science Museum, University of Alberta open house and industry plant open houses. The display has also been used in support of Environment Week and at a regional Air Pollution Control Association Convention.

An information brochure is available, outlining the Association's activities and the Air Monitoring Network. These are used as handouts at information meetings with local schools, environmental groups and in support of the Air Monitoring display.

Association members also personally visit local schools and various organizations to explain the activities of the Association, operation of member company plants and to review air quality in the local area. All parties find these visits most worthwhile and Association members are seeking opportunities to provide interested parties and organizations with information on its activities.

WASTE MANAGEMENT

Waste management is probably the most critical environmental issue of the eighties. It is an area of high activity at the present time for Environmental Departments in provincial governments across Canada. It is also a major area of activity of the Strathcona Industrial Association.

There will be a period of accelerated learning over the next few years as all sectors of society learn to manage waste more effectively. The individual member companies of the Strathcona Industrial Association have spent many hundreds of thousands of dollars in recent years upgrading plant waste treatment and disposal systems, and monitoring procedures.

In March 1985, the Government of Alberta approved the Hazardous Waste Regulation 49/85, pursuant to Section 16 of the Hazardous Chemicals Act (1980). The Regulation allowed Alberta Environment to act quickly to control the operation of waste storage facilities.

The Regulation required some review and revision, and the Minister of Environment re-assembled the Hazardous Chemicals Act Advisory Committee in April 1985 to advise him on hazardous waste regulations and guidelines. The Strathcona Industrial Association was pleased to have a strong representation on this Committee and to provide technical input to the development of sound regulations.

The Association participated on the Committee, in addition to 16 other industrial groups, agricultural, utility, government agencies and environmental interest organizations. As a first objective, the Committee prepared recommendations for modifying the Regulation to control effectively the handling and disposal of all hazardous waste in the Province. Recommendations have been forwarded to the Minister.

The Committee's work is continuing as it assists Alberta Environment in the development of readily understandable Guidelines to accompany the Regulation.

Industry wishes to protect the environment and recognizes that technical competence is needed to dispose of unavoidable wastes in a totally safe manner, while keeping the cost of testing and disposal reasonable. The challenge to the Hazardous Chemicals Advisory Committee is to establish a framework which encourages the development of economically acceptable solutions to the complex problems of waste disposal that must be done in an environmentally safe manner.

INTRODUCTION

The Strathcona Industrial Association (SIA) is an association of nine companies operating heavy industrial plants in the eastern portion of the City of Edmonton and immediately to the east of the City boundaries in the County of Strathcona.

Member companies play a significant role in the municipal, provincial and national economies; they employ approximately 4,000 people, and approximately 45,000 persons are directly and indirectly supported by these industries.

Members:

Alcan Smelters and Chemicals Ltd
Celanese Canada Inc.
C-I-L Inc.
Fiberglas Canada Inc.
Esso Petroleum Canada
Interprovincial Pipe Line Limited
Petro-Canada Products
STELCO Inc.
Turbo Refineries Ltd.

Many of the products are used by all of us in our daily lives. Examples are gasoline and diesel fuel, chemical building blocks for plastics in automobiles, various household goods, steel, and insulation products, to name a few.

The member companies work together for the purpose of solving mutual concerns, not only those arising out of the operation of industry, but also concerns of the public and of government. The members of the Association consider that they are good neighbors and act as responsible corporate citizens. The Association meets on a regular basis and individual members attach considerable importance to their involvement in the affairs of this Association.

Further Information
Please contact:
Chairman, Technical Committee – (403) 464-8643
Strathcona Industrial Association
%Petro-Canada Products
Box 97, Edmonton, Alberta T5J 2G9

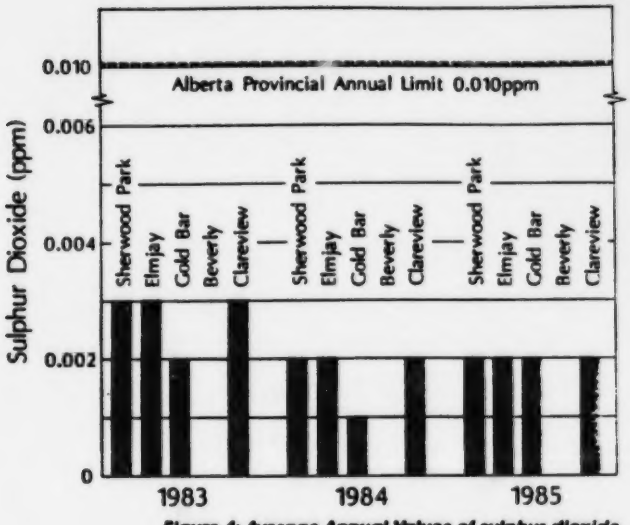


Figure 1: Average Annual Values of sulphur dioxide recorded at each station (1983- 1985)

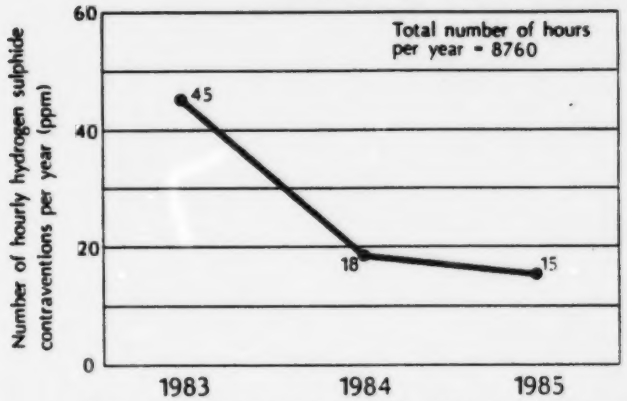


Figure 2: Number of hourly hydrogen sulfide contraventions recorded at all stations (1983 - 1985)

AIR MONITORING NETWORK

Industrial monitoring requirements for both ambient monitoring and stack monitoring are determined by the regulatory authority, Alberta Environment. These requirements are specified in individual plant operating licences and also according to regulations and guidelines under the Provincial Clean Air Act.

Description

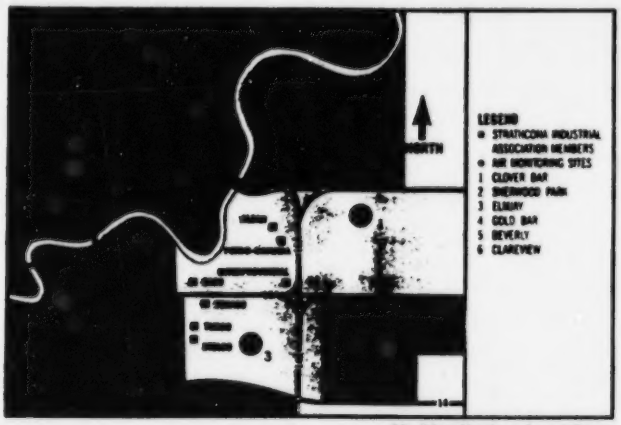
The Air Monitoring Network, established in 1979, consists of six permanent stations designed and strategically located to cover prevailing wind directions and major residential areas. It was developed in close co-operation with Alberta Environment. The pollutants, monitored on a continuous basis, are shown in Table 1 for each station location. Readings are taken every 30 seconds throughout each day and throughout the year.

A central computer, printer and video console are supported by two disc drives. One minute values of all parameters in the continuous monitoring network are determined from the instantaneous values. Five minute average values and one hour average values are calculated from the one minute values and are stored on disc. Daily average values are calculated from the hourly values.

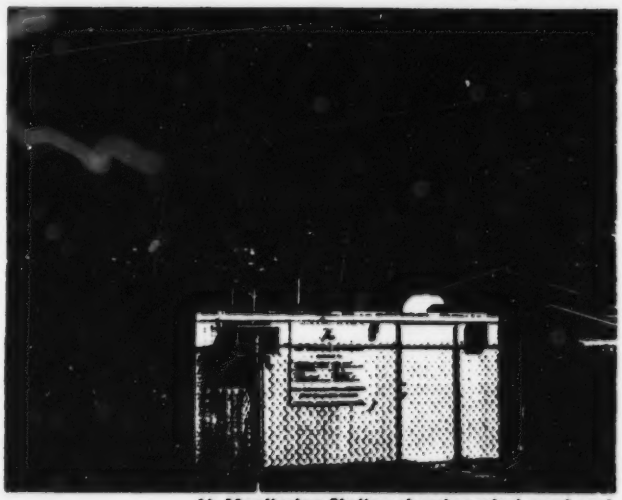
Access to the Air Monitoring Network is through dedicated telephone lines, ordinary voice grade telephone lines or by a terminal or printer at the Network Management offices or at the computer location.

It is a real-time data acquisition and control system that is completely user definable and user maintainable. The Air Monitoring Network user can access 17 different types of reports. The many report options and the selection of monitoring station, pollutant and type of data average available to the user, illustrate the flexibility and alternative options for any set of air monitoring information represented by an available report.

It is emphasized that all these reports are accessible by *all* Network users and that all necessary calculations and any access to historical data are performed automatically; each average is checked against a specific ambient limit and contravention reports are prepared automatically. Automatic checks against "alert" limits specified by the Association for its own surveillance needs are also provided.



Air Monitoring Locations



Air Monitoring Station showing wind mast and Hi-Volume sampler located in Clareview

Air Monitoring Reporting

The regulatory authority, Alberta Environment has direct access to the Air Monitoring Network to permit government personnel to access current and historical air quality data in the residential and industrial areas of Edmonton. All air quality data including data on out-of-compliance situations and historical data are made accessible to both industry and government personnel on an as-required basis at any time of day and for any time duration.

During 1983, there were joint industry/government discussions which culminated in the installation of a MESSAGE BOARD system by which reasons for any contravention of prescribed limits would be recorded and archived, along with the air quality data.

This was a significant decision on the part of Alberta Environment and it illustrates the mutual trust between the regulated (industry) and the regulator (Alberta Environment). This development came about solely from industry/government co-operation in ensuring that the environment would be protected.

AIR QUALITY

The air quality assessment is based on the three years' air quality data obtained from January, 1983 to December, 1985. This period of time is chosen since it represents three full years of operation of the present Air Monitoring Network.

The present Air Monitoring Network commenced operation in August 1982 with a six station network that had been converted from a five station network, in accordance with requirements of the regulatory authority, Alberta Environment.

The ambient air monitoring limits set by Alberta Environment are some of the most stringent in Canada (Table 2). Air quality data from the Association's Network are compared with these limits and the assessment is based on annual average values and the number of contraventions that are recorded each year.

Air quality in the Strathcona Industrial Area and East Edmonton Area may be summarized as follows:

Sulphur Dioxide

- No contraventions were reported during the three years (1983-1985).
- Annual average values decreased from 0.003 ppm in 1983 to 0.002 ppm in 1985.

- Hourly and daily values recorded at all six stations were very low and very much below the Alberta Provincial Standards for sulphur dioxide.

Hydrogen Sulfide

- A marked decrease in hourly and daily contraventions has been reported on an annual basis in each year, from 45 hourly contraventions in 1983 to 18 hourly contraventions in 1984, down to 15 hourly contraventions in 1985. Expressed as a percentage of the total number of hours in a year, these contraventions represent 0.5% in 1983, 0.21% in 1984, and 0.17% in 1985.
- Annual average values for all stations show a distinct trend to lower values, with the annual average value being 0.001 ppm in 1983 and with the majority of the stations (5/6) averaging 0.000 ppm in 1985.

Nitrogen Dioxide

- Annual average values have remained relatively constant over the three years, ranging from 0.004 ppm to 0.017 ppm. The recorded values are much below the limits set by Alberta Environment.
- Levels of oxides of nitrogen are mainly associated with automobile traffic; emissions from Association industry members are not significant.

Total Hydrocarbons

- Annual average values ranged from 1.3 ppm to 2.0 ppm, very close to expected levels of total hydrocarbons in the atmosphere (approximately 1.5 ppm).
- There is no Provincial limit set for total hydrocarbons.

Total Suspended Particulates

- A decrease in daily contraventions has been reported from 29 contraventions reported in 1983 to 4 contraventions reported in 1984. The majority of the 9 contraventions reported in 1985 were associated with local construction close to one of the stations.

In summary, the air quality as measured by the Air Monitoring Network is good and there has been some improvement over the last few years, even though there have been major expansions in the area by several companies.

Conclusion

The Strathcona Industrial Association's Air Monitoring Network is a unique multi-industry network in Canada developed by industry in co-operation with government. All air quality reports are now automatically generated and transmitted to industry and government. Both industry and government have benefitted by consolidation of monitoring information, resulting in increased availability of both current and historical air quality data.

TABLE 1: Names of Stations and Instruments

Instrument	Sulphur Dioxide SO_2	Hydrogen Sulphide H_2S	Nitrogen Dioxide NO_2	Nitric Oxide NO	Total Hydrocarbons THC	TSP*	Wind
STATION							
CLOVER BAR (1)		X	X	X		X	X
SHERWOOD PARK (2)	X	X			X	X	X
ELMJAY (3)	X	X	X	X		X	X
BEVERLY (4)	X	X	X	X	X	X	X
CLAREVIEW (5)	X	X	X	X		X	X
GOLD BAR (6)	X	X				X	X
TOTAL MONITORS	5	6	4	4	2	6	6

*Total Suspended Particulates

TABLE 2: Alberta Provincial Limits For Ambient Air

Contaminant	Averaging Period	Maximum Permissible Concentration ($\mu g/m^3$)	Maximum Permissible Concentration (ppm)	Monitoring Type
Sulphur Dioxide (SO_2)	one hour	450	0.17	Continuous
	24 hours	150	0.06	
	annual mean	30	0.01	
Nitrogen Dioxide (NO_2)	one hour	400	0.21	Continuous
	24 hours	200	0.11	
	annual mean	60	0.03	
Hydrogen Sulphide (H_2S)	one hour	14	0.010	Continuous
	24 hours	4	0.003	
	annual mean	—	—	
Total Suspended Particulates (TSP)	24 hours	100	—	24 h period every six days
	annual geometric mean	60	—	
Total Sulphation* (Static)	one day	0.5 mg/100 cm^2 (SO_3 equivalent)		30-day period
Hydrogen Sulphide (Static)*	one day	0.1 mg/100 cm^2 (SO_3 equivalent)		30-day period

*Guideline level.

The development of this Air Monitoring Network and the use of automatic reporting is a good example of industry and government working together to protect the environment in an atmosphere of mutual trust for a common goal.

Fort Saskatchewan Regional Industrial Association Brief to the Environmental Enforcement Review Panel

(October 13, 1987)

FSRIA

Fort Saskatchewan Regional Industrial Association

FSRIA

Fort Saskatchewan Regional Industrial Association

October 8, 1987

Alberta Environment
14th Floor
9820 - 106 Street
Edmonton, Alberta
T5K 2J6

Attention: Mr. Ken Smith
ADM Environmental Protection Services
Chairman
Environmental Law Enforcement Review Panel

Dear Mr. Smith:

On behalf of the Fort Saskatchewan Regional Industrial Association, I am pleased to submit the attached brief to you and the other members of the Environmental Law Enforcement Review Panel. The conclusions and recommendations contained in the brief, reflect the unanimous views of the Association Directors.

We urge the Panel's careful consideration of these recommendations and wish to emphasize that FSRIA members remain committed to providing the necessary resource personnel to participate in developing specific improvements to the present regulatory and enforcement system.

If, following the presentation of the brief on October 13, 1987, any member of the Panel requires additional clarification on any aspect, please do not hesitate to contact either Mr. Rob Routs (992-3472), Mr. Bob Lutz (998-8234) or myself (998-8220).

Sincerely

D.B. Cattran
President
Fort Saskatchewan Regional Industrial Association

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encl

P.O. Box 3450
Fort Saskatchewan, Alberta
T8L 2T4

FORT SASKATCHEWAN REGIONAL INDUSTRIAL ASSOCIATION
BRIEF TO THE
ENVIRONMENTAL ENFORCEMENT REVIEW PANEL

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1. EXECUTIVE SUMMARY OF CONCLUSIONS and RECOMMENDATIONS

* **ENFORCEMENT REVIEW MANDATE and PROCESS**

From recently received information, it is nov apparent that the scope of the enforcement reviev is extremely broad, involving a vide range of both legal and technical issues.

FSRIA RECOMMENDATION - That the Panel adopt a multi-partite concensus process to define in detail the improvements required, as the cornerstone of its Action Plan to the Minister.

* **REGULATORY PHILOSOPHY and SYSTEM**

The regulatory approach embodied in air and vater legislation coupled with the hierarchy of enforcement options has been effective in achieving an extremely high degree of industrial compliance and protecting Alberta's environment.

FSRIA RECOMMENDATION - That the Panel recommend development of a publicly available statement of policy and management principles followed by Alberta Environment for regulating air and water quality.

* **PRESENT ENFORCEMENT APPROACH**

The corrective and preventative focus followed by Alberta Environment to obtain compliance using a consultative approach, has been and must continue to be the principal objective of enforcement. FSRIA does not support a change in philosophy or practice away from a corrective, preventative focus to a punitive focus involving only prosecution.

FSRIA RECOMMENDATION - Prosecution should be available to the Department as one of the enforcement options where there is evidence of:

1) wilful disregard of licence conditions or regulatory requirements, or

2) negligence by the licensee which acutely affects the health or safety of the public or results in demonstrable impairment of the environment.

* REGULATION OF INDUSTRIAL OPERATIONS

1) "STEADY STATE" or "NORMAL" OPERATIONS

FSRIA RECOMMENDATION - That the Panel recommend Alberta Environment incorporate the concept of allovable variance in setting technology-based, source concentration limits in licences-to-operate.

2) "START-UP" or "WAIVER" CLAUSES

FSRIA RECOMMENDATION - That the Panel recommend creation of a representative, multi-partite, concensus working group with sufficient time and the mandate to develop specific detailed alternatives to the present form of "waivers" employed in licences-to-operate.

3) "UNPREDICTABLE, EMERGENCY" SITUATIONS

FSRIA RECOMMENDATION - That the Panel recommend creation of a representative, concensus group to develop specific recommendations for regulation of emergency situations.

* RESTRUCTURING/REALLOCATION of RESOURCES

FSIRA supports any restructuring/reallocation of resources within Alberta Environment aimed at eliminating waste and improving efficiency in delivery of its services. Available resources must be allocated to those programs which result in measurable improvement in environmental quality.

FSRIA RECOMMENDATION - That the existing industrial compliance and performance data base be given careful consideration in determining first the need and second the resources to allocate to the nev Enforcement Division announced by the Minister.

* PUBLIC AVARENESS and EDUCATION

FSRIA RECOMMENDATION - That Alberta Environment adopt a proactive, leadership role in communicating data on environmental quality and industrial performance in Alberta to the public and that consideration be given to enhancing the resources available to undertake this activitiy.

2. THE FORT SASKATCHEWAN REGIONAL INDUSTRIAL ASSOCIATION

Formed in September 1981, the Fort Saskatchevan Regional Industrial Association presently represents 17 industrial members and functions as a non-profit organization dedicated to maintaining a healthy natural environment in the Fort Saskatchevan area, as vell as fostering economic stability and encouraging commercial grovth within the community. (See Appendix for listing of FSRIA member companies.)

The association provides a vehicle for individual member companies to pool resources and personnel and act effectively in addressing common concerns.

* to maintain a program of liaison and communications with our communities, municipal and provincial governments and other groups on issues, among others related to the environment, public safety, health and the benefits provided by industry to the community;

* to encourage the development of reasonable and effective legislation addressing safety, health and environmental issues;

* to foster responsible performance among members in the area of environmental control, product stevardship and occupational health;

* to encourage the municipal and provincial governments to adopt reasonable and equitable taxation policies;

* to maintain a positive profile of industry with all levels of government as a competent, professional resource in the development of legislation and regulations; and

* to develop an understanding within our publics of the place of industry as a generator of economic grovth and of our contribution to the velfare of our communities.

The conclusions and recommendations contained in this brief were formally revieved at a meeting of the Association Directors on October 7, 1987 and represent the unanimous views of our membership.

3. THE ENVIRONMENTAL ENFORCEMENT REVIEW PANEL MANDATE

The August 18, 1987 press release announcing the formation of the Environmental Enforcement Review Panel, stated the Panel's mandate was to develop a recommended "action plan" for the Minister (by October 31, 1987) to "strengthen the enforcement of Alberta's environmental statutes". The mandate directed the Panel to:

1) Review start-up clauses in Licence-to-Operate
2) Review the present enforcement approach
3) Review enforcement in other jurisdictions

In a letter to the Hon. Ken Kovalski, dated August 28, 1987, Doug Cattran, president of the Fort Saskatchevan Regional Industrial Association, requested clarification of the Panel's mandate and recommended the use of a multi-partite concensus process to address the fundamental changes implied by this scope. (See Appendix).

Although the Panel has been active for the past month and one-half, the true extent of the issues being considered has only recently become apparent (by way of an attachment to a letter from the Minister dated September 30, 1987 and received by our Association representative on October 2, 1987).

It is nov clear from the document titled "Issues for Discussion" that the scope of the Panel's review is substantially broader than ve were led to believe and includes consideration of a vide range of both legal and technical issues related to regulation and enforcement. The scope is certainly much broader than the legal enforcement issues raised as a result of the Department's inability to initiate prosecution related to the Western Co-Op Fertilizer incident.

We can only reiterate our strong belief in the effectiveness of a multi-partite, concensus process to address the breadth of these complex issues. While this approach may initally involve more time, our experience is that the acceptance and implementation of the solutions developed using this approach has proven to be more effective. Examples of the results obtained using this process include the effective work of the Hazardous Chemicals Advisory Committee, the nev federal Environmental Protection Act and the federal/provincial WHMIS system. We also note that the philosophy of the multi-partite concensus approach is a fundamental component of the recommendations contained in the National Task Force on Environment and Economy report.

In conclusion, our Association urges the Panel promote the adoption of the multi-partite, concensus approach as the cornerstone recommendation in its Action Plan to the Minister to define in detail the improvements required to the present environmental regulatory and enforcement system. Our Association is committed to provide the resources required to participate in this activity.

4. GENERAL COMMENTS ON ALBERTA ENVIRONMENT'S PHILOSOPHY & REGULATORY SYSTEM

The mandate of Alberta Environment has stood for many years as "promoting a balance between resource management, environmental protection and the quality of life". Recently in the March 5, 1987 Throne speech, this mission statement was enhanced to include a focus on protecting and improving the quality of the environment for the future.

The Members of our Association share and support the commitment to environmental protection embodied in the Department's statement of purpose. We also note it is consistent with the objective and philosophy contained in the recently completed report* of the National Task Force on Environment and Economy (on which the Hon. Mr. Kovalski was a member and signator), viz. "Our main objective is to promote environmentally sound economic growth and development, not to promote either economic growth or environmental protection in isolation."

To achieve this stated purpose, Alberta Environment through the Clean Air and Water Acts and their companion regulations, have evolved a regulatory system with the following features:

1) a licencing process for operating facilities which promotes the utilization of best practical emission control technology including:

   a) specific identification of major emission points
   b) stringent technology-based source limits together with ambient criteria in the licence and regulations
   c) specific requirements for emission monitoring to measure the actual performance of the facility and
   d) routine and non-routine reporting and notification requirements.

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* Report of the National Task Force on Environment and Economy submitted to The Canadian Council of Resource and Environment Ministers, September 24, 1987 (pg. 2)

3) an array of enforcement options including directives, control orders, stop orders and recommendations for prosecution through the courts to be used at the discretion of the Director of Pollution Control

4) a very large data base within the Department on the quality of Alberta's environment together with empirical data on the actual performance of industry.

We believe this data base, which by the Department's own account, demonstrates an exceptionally high degree of industrial compliance with licence and regulatory requirments (98%), is without parallel in Canada or elsewhere. Further, we believe this data is strong support for the effectiveness of the present regulatory approach and philosophy.

No one can seriously object to efforts targetted at seeking out additional opportunities to further refine and improve upon the existing system. However, we wish to emphasize our deep concern for the current review, that in the zeal to correct a perceived flaw one does not substantially alter those aspects of the present system which are the keys to its success.

One action which PSRIA believes could aid in clarifying the Department's purpose and regulatory philosophy for industry and the public is the development of a statement of policy and management principles applied to air and water quality. We note that such a document has been prepared for the Government's approach to the management of Hazardous Waste and Recyclable Materials in Alberta. Our Association believes this is an excellent means of communicating the Department's policy and regulatory framework.

We therefore suggest the Panel include a recommendation that the Department develop a publicly available statement of policy and management principles used to guide its regulation of air and water quality. The principles enunciated in the policy respecting the management of hazardous wastes and recyclable materials, in our opinion, provides an excellent model to be followed.

5. THE PRESENT APPROACH TO ENFORCEMENT

In our Association's viev, Alberta Environment's present approach to enforcement can be generally described in our Association's viev, as one focussed on prevention and correction involving consultation and co-operation. We support the continuation of this approach to enforcement which is consistent both with the stated mission of the Department and the basis on which industrial operations have been regulated in the Province.

The Clean Air and Water Acts define a range of enforcement options which are available to the Director of Pollution Control including Directives, Control Orders, Stop Orders and prosecution. The Pollution Control Division has historically folloved a flexible approach to enforcement employing technical discussions and/or the aforementioned statutory enforcement options with the objective of quickly obtaining and maintaining compliance with regulatory reguirements and licence conditions.

This preventative focus is and must continue to be the principal objective of enforcement for Alberta Environment.

The true measure of the effectiveness of Alberta Environment's regulatory and enforcement approach in meeting the Department's stated purpose does not, ve submit, rest solely on its ability to successfully obtain judgements in the courts, but rather on the performance data base for industry operating within the province.

Critics of the flexible, consultative enforcement approach folloved by Alberta Environment, point to the number of control orders, stop orders, directives and prosecutions initiated by the Department in the past, as evidence of veakness in the environmental enforcement process. Our Association completely disagrees with this opinion.

The very fact that these enforcement options have not had to be used frequently coupled with the high degree of industrial compliance with existing stringent regulatory and licence requirements, is strong evidence of the responsiveness of industry to the prompt and effective resolution of problems under this consultative enforcement process.

Our Association does not support change in the enforcement philosophy and practices used by Alberta Environment which would see the present enforcement hierarchy with its corrective/preventative focus abandoned in favour of a punitive, reactive enforcement philosophy involving only prosecution. However, we do support the position that prosecution should be possible when there is evidence of:

1) wilful disregard of licence conditions or regulatory requirements or
2) negligence by the licensee which results in public health and/or safety being acutely affected or demonstrable impairment of the environment.

6. REGULATION OF INDUSTRIAL OPERATIONS

A. LICENCES-TO-OPERATE - "STEADY-STATE" or "NORMAL" OPERATIONS

Industrial operations which involve emissions to air or water or both, are regulated using the vehicle of a licence-to-operate which defines:

1) the emission points of interest
2) prescribed limits of emissions (either in concentration or mass units or both), for each source,
3) the required monitoring frequency and methodology
4) reporting requirements.

The source emission limits prescribed in these licences are established largely on the basis of the technical capability of the process involved under "steady-state" or so-called "normal" operation but without exception, are many times lover than those which will produce adverse effects on the health and safety of people or the environment. Both Clean Air and Water Acts together with specific clauses in licences, require the immediate reporting of exceedences of these presecribed source emission limits to Alberta Environment.

As presently established, the source concentration limits do not appear to reflect the reality of inherent process variability (ie. the concept of statistical process control). Simply stated fluctuation (variability) about an average is a normal feature of well-controlled industrial processes. It is possible to statistically predict the normal range or spread of this variability. Given this, it is also possible to identify those instances outside the normal range of variability which might be indicative of significant changes in the process which require investigation and corrective action. Notwithstanding this technological reality, licence emission point concentration limits are expressed as a single numeric value with no variability term.

When determining the appropriate degree of enforcement action to take in response to a reported excursion above a licence limit, the Department has exercized discretion and judgement in recognition of the technological impossibility of attaining 100.0% compliance 100.0% of the time.

Since neither the wording of the Acts nor the licences acknovledge this reality, the public perception is that every excursion is a violation of law which should initiate prosecution.

The Panel should recommend the Department incorporate the concept of allovable variance in establishment of source concentration limits. This approach vill more accurately reflect the reality of industrial operations and avoid the loss of public credibility the Department suffers as a result of not being "seen" to enforce the terms of a licence.

B. LICENCES-TO-OPERATE - "START-UP" OR "WAIVER" CLAUSES

The incident which provided the impetus for the creation of this Panel centres on the Department's apparent inability to initiate a prosecution for an alleged emission which occurred at a Calgary facility during a period to which a licence clause waiving normal emission limits applied.

Presumably, the existence of the so-called "waiver" or "start-up" clauses in a relatively small number of clean air licences-to-operate (45 out of approx. 2200 air licences), reflects a practical recognition by the Department of the technical impossibility of immediately achieving emission criteria developed for "steady-state", "normal" operation. It is also clear that the start-up waivers were not intended to allow unlimited emissions during the period of their application. We would also submit no operating evidence exists to suggest that they are regarded as such, by those who hold licences in which they appear.

Not withstanding these facts, we agree that the manner in which these start-up waivers are presently worded creates the perception of providing an opportunity for unlimited discharge. Our Association is in general agreement with the conclusion reached by the joint government industry Task Force created by this Panel to examine this specific aspect of licencing.

The group has recommended there is a need to re-define or refine the present waivers by either:

1) the addition of some form of procedural or numerical upper controlling limit or
2) revision of the licence criteria to recognize the inherent variability of some types of processes during the startup (and in some cases, shutdown) phase of their operation.

Our Association representatives were active participants in the discussions of the Task Force which focussed on identifying potential solutions to this problem. We concur that controlling the frequency, number or duration of startups through the terms and conditions of a licence-to-operate is practically and technically impossible for the Department and represents an intrusion into the commercial operation of an industrial facility not contemplated in the language of the legislation.

We cannot overstate the fact that while the Task Force did identify a number of potential opportunities for improvement on the present situation, the short time available for its deliberations did not permit the development of specific recommendations or specific solutions and it would be incorrect to interpret the presentation of their discussions as such.

Our Association strongly urges the Panel to include a recommendation in its Action Plan to the Minister, to create a more representative, multi-partite group with a mandate to develop specific alternatives using a concensus process to the present practice used in regulating startups. Clearly, this work must allow for a time-frame which is sufficiently long to fully define the relative merits and potential impact of each option.

The discussions which took place in the Task Force meetings provided useful information from which to develop mutually satisfactory alternatives which meet the objectives of the legislation while accounting for the realities of certain types of process technology.

We cannot overstate our concern for the potential damage which could unintentionally be done to the effectiveness of the present regulatory approach by the hasty adoption of a "solution" in reaction to an incident without careful consideration of all options and implications involving all affected parties. Such an approach would also be consistent with the Department's philosophy of consultation.

To reiterate, our Association is convinced of the effectiveness of the representative, multi-partite consultative process in developing effective solutions to complex issues such as this. Members of FSRIA stand ready to commit the necessary time and resources to such an effort.

C. LICENCES-TO-OPERATE - "UNPREDICTABLE, EMERGENCY" SITUATIONS

The discussions in the two meetings of the Task Force identified an additional opportunity for improvement of the present regulatory system. That is, the situation of an emission which occurs as a result of an unpredicted, emergency situation in an industrial operation.

In discussing this situation,it is necessary to clarify a couple of points of fact.

First, while the probability of such an occurence may be remote (and our members are committed to continuously revieving their operations to further reduce the likelihood of such an event), it could occur in a facility which is consistenly maintaining a high degree of compliance with its licence conditions and regulatory requirements.

Second, the emission could occur from a source within the facility not defined as a licenced source for which acceptable emission limits have been prescribed.

Third, the unpredicted emergency situation giving rise to the emission could have resulted from factors beyond the control of the operator.

Fourth, and unarguably most important, when such an event does occur, the principal objective for the operator must be to take appropriate steps to minimize the duration and impact of the resultant emission including, prompt notification of potentially impacted groups so they may initiate appropriate precautionary measures.

To be clear, we are not talking about emissions which are only marginally above the stringent technology-based limits presently set out in licences, but emissions of a magnitude which pose

potential acute risk to the health or safety of the impacted public.

Both Acts and we understand, all licences, contain a requirement to notify the Department of Environment in the event of an emission in excess of licence conditions or an unauthorized (unlicenced), emergency discharge.

Our Association is in general concurrence with the discussions of the Task Force that consideration be given to requiring the following (either through specific regulatory amendment or in the terms of the licence):

1) that a licensee has undertaken a process to identify those situations with a potential to cause an emission which could acutely impact the health or safety of the public,
2) have defined plans in place to respond to such emergencies including a process to notify local authorities with responsibility for public emergency planning, and
3) established the steps to be taken within the operation to minimize the duration and potential impact of the emission.

If this approach were adopted, enforcement would focus not on the fact that the emission had occurred (unless there was evidence to suggest negligence or a lack of diligence on the part of the operation in the operation or maintenance of the facility), but on whether the operator had undertaken the appropriate notification and reasonable steps to minimize the impact of the emission. This approach we believe, would be entirely consistent with the preventative and protective philosophy followed by the Department.

We also note that these elements of emergency preparedness are also embodied in the Community Awareness/Emergency Response program developed by the Canadian Chemical Producers' Association.

Again however, we must emphasize to the Panel members that while a good deal of agreement was generated within the Task Force for this approach, there remains a considerable amount of work to be done to fully refine it into a set of specific recommendations for regulatory change.

We would again repeat our strong recommendation that the Panel incorporate, in its Action Plan to the Minister, the creation of a representative, multi-partite working group, to develop specific concensus recommendations regarding regulation of emergency situations.

7. RESTRUCTURING and/or REALLOCATION OF RESOURCES WITHIN ALBERTA ENVIRONMENT

The Association supports the concept of continual review of management systems with the view of improving their effectiveness and efficiency. This is particularly necessary in times of economic restraint.

In general therefore, we would support any restructuring or reallocation of resources within the Department, aimed at eliminating unnecessary redundancy and waste and improving the efficiency of the Department's internal operation and the level of service it provides.

We are not in a position to judge whether it may be appropriate for the Department to have ready access to legal advice from within its own organization. However, we cannot emphasize too strongly that the resources which are available to the Department be applied to those responsibilities and programs which result in measurable improvement in the quality of the environment.

In response to the Minister's stated intent to create a new "Enforcement Division" within the Department, we would restate our deep concern that this action may represent a fundamental shift in philosophy away from the current effective consultative, enforcement approach toward an inflexible, reactive and punitive enforcement approach. We strongly urge that the existing industrial performance and compliance data base be given careful consideration in determining first, the need and second, the resources to allocate to this new Division.

8. PUBLIC AWARENESS and EDUCATION

Given the size of the data base which already exists within the Department on environmental quality in general, and industrial performance and compliance in particular, we believe the Department is in a unique position to take a proactive, leadership role in making this information available to the public.

When considering the restructuring and reallocation of resources within the Department, we would recommend consideration be given to enhancing the resources of the public information group, as well as those new and existing programs, whose success is predicated on informed, voluntary compliance. Examples of the programs which could benefit from increased resources include the new hazardous waste management system and quality assurance programs.

APPENDICES

CURRENT MEMBERSHIP OF THE
FORT SASKATCHEWAN REGIONAL INDUSTRIAL ASSOCIATION

ALBERTA FOOD PRODUCTS
BF GOODRICH CANADA INC.
CHEVRON STANDARD LTD.
C-I-L FORT SASKATCHEWAN INC.
DEARBORN CHEMICAL COMPANY LTD.
DOME PETROLEUM LIMITED
DOW CHEMICAL CANADA INC.
ESSO CHEMICAL ALBERTA LIMITED
GUARDIAN CHEMICALS LTD.
HORTON CBI LIMITED
LIQUID CARBONIC CANADA LTD.
NORCEN ENERGY RESOURCES LIMITED
PROCOR LTD., LPG DIVISION
SHELL CANADA LIMITED
SHERRITT GORDON MINES LIMITED
THIO-PET CHEMICALS LTD.
UNION CARBIDE CANADA LIMITED

FSRIA

Fort Saskatchewan Regional Industrial Association

87 08 28

Honourable Kenneth R. Kovalski
Minister of the Environment
Minister, Alberta Public Safety Services
Legislative Buildings
Edmonton

Dear Mr. Kovalski;

Re: Environmental Enforcement Review Panel

I am writing on behalf of the Fort Saskatchewan Regional Industrial Association (FSRIA) regarding the Environmental Enforcement Review Panel. From the limited information available we have some concerns regarding the scope of the review, the composition of the panel and the process and timetable to be employed in undertaking this review.

Media accounts and your press release of August 18th seem to indicate the panel has been created to make recommendations to strengthen enforcement of Alberta's environmental statutes, together with revising the internal structure of the Environmental Protection Service and reviewing risk management approaches used by the Department. Fundamental changes which are implied by this scope would, in our opinion, be best addressed in a forum where all stakeholders could work towards consensus on these complex issues. The consensus process is initially more time consuming but the acceptance and implementation whether in the legislature, media or in ultimate operation, has proven to be more effective.

The most recent example being the effective work done by the Hazardous Chemicals Advisory Committee in contributing to the development of a comprehensive waste management system for the Province. The new federal EPA and the federal - provincial WHMIS system are also positive results of such a multi-partite, consensus process while there are countless examples of ongoing controversy when broad consensus was not sought. Our Association is convinced of the effectiveness of such a multi-partite consultative approach and stands ready to be an active participant.

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Fort Saskatchewan, Alberta
T8L 2T4

Hovever, if the scope of the reviev has been overstated and the purpose is to close a fev legal loopholes, (which apparently exist according to media reports on recent incidents), then such a broad consensus might not be critical. We do support the position that prosecution should be possible when public health is affected or when the environment has been demonstrably impaired other than by an "Act of God". This prosecution could be made possible as an override on whatever the licence clauses might say, ie. We do not believe a "technicality" should prevent prosecution in these cases.

In general, the present environmental protection system, which is characterized by comprehensive licencing of industrial operations, strict emission limits, extensive monitoring and reporting requirements, is, in our viev, second to none in the degree of protection afforded the environment and citizens of Alberta. The extensive performance database vhich exists within the Department ve believe is a testament to the high degree of compliance maintained by industry within the province to these stringent requirements.

We are pleased to be able to participate in the Task Force looking at non-steady state operations as one input to the panel. We will also be requesting an opportunity to make further submissions to the panel if it seems appropriate after its mandate is clear.

We would greatly appreciate clarification from you on the scope of the panel's mandate which may vell lay to rest the concerns of our members.

Yours truly,

(Original signed by)

D.B. (Doug) Cattran
President
FSRIA

/sg